GSD (PROC-I)/186615/Supply/CMS/2024

BIDDING DOCUMENTS

for

Supply, Development, Implementation, Integration and Technical Support of Currency Management System

(Single Stage: Two Envelope Procedure)

December, 2024

Procurement Division I (IT), General Services Department, SBP Banking Services Corporation – SBP BSC
4th Floor BSC House, I.I Chundrigar Road, Karachi,
Phone: (92-21)–32455948 & 32455482, Facsimile: (92-21)-99221176
Email: gsd.proc@sbp.org.pk, Website: www.sbp.org.pk

PREFACE

Rule 23 of Public Procurement Rules requires procuring agencies to formulate bidding documents that shall be made available to the bidders immediately after the publication of the invitation to bid.

Document comprises of the Sections listed below:

PART-A – BIDDING PROCEDURE & REQUIREMENTS

PART – A – BIDDING PROCEDURE & REQUIREMENTS

Section I	**Invitation to Bids (ITB)**
Section II	**Instructions to Bidders (ITBs)**
Section III	**Bid Data Sheet (BDS)**
Section IV	**Eligible Countries**
Section V	**Technical Specifications, Schedule of Requirements**
Section VI	**Standard Forms**

PART – B – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VII	**General Conditions of Contract (GCC)**
Section VIII	**Special Conditions of Contract (SCC)**
Section IX	**Contract Forms**
	Integrity Pact

PART – A – BIDDING PROCEDURE & REQUIREMENTS

Section I - **Invitation to Bids (ITB)**

Section II - **Instructions to Bidders (ITBs)**

This Section provides information to help Bidders prepare their Bids. Information is provided for the submission, opening, and evaluation of Bids and for the award of Contract.

Section III - **Bid Data Sheet (BDS)**

This Section includes provisions specific to procurement and to supplement Section-II, Instructions to Bidders.

Section IV - **Eligible Countries**

This Section contains information regarding eligible countries.

Section V - **Technical Specifications, Schedule of Requirements**

This Section includes the details of specifications for the goods and ancillary services to be procured and schedule of requirements.

Section VI - **Standard Forms**

This Section includes the standard forms for the Bid Submission, Price Schedules, and Bid Security etc. These forms are to be completed and submitted by the Bidder as part of Bid.

PART – B – CONDITIONS OF CONTRACT AND CONTRACT FORMS

Section VII - **General Conditions of Contract (GCC)**

This Section includes the general clauses to be applied in all the contracts.

Section VIII - **Special Conditions of Contract (SCC)**

This Section consists of Contract Specific general and special conditions.

Section IX - **Contract Forms**

This Section contains forms which, once completed, will become part of the Contract. The forms for **Performance Security** will be submitted by the successful bidder to whom Letter of Acceptance is issued, before the award of contract.

Integrity Pact

The successful bidder shall be required to furnish Integrity Pact as per the attached format.

PART-A

BIDDING PROCEDURE & REQUIREMENTS

SECTION I: INVITATION TO BIDS (ITB)

SBP Banking Services Corporation

CORRIGENDUM

No. GSD (PROC-I)/ 186615/ Supply/CMS/ 2024
Date: 28 January 2025

Supply, Installation, Implementation, Integration, Configuration and Technical Support of Currency Management System

Refer to Tender Notice *IFB No. GSD (PROC-I)/ 186615/ Supply / CMS/ 2024* appeared in Newspapers on January 05, 2025 as well as uploaded on PPRA and SBP websites.

1. The bids submission date has been extended, now the bids shall be submitted to the office of the undersigned on or before **Monday, February 24, 2025, 11:00 A.M.** Bids will be opened on same day at **11:30 A.M**. in Meeting Room, General Services Department 4th Floor BSC House, State Bank of Pakistan Banking Services Corporation, I.I Chundrigar Road, Karachi –Pakistan.
2. Other terms and conditions of bidding documents will remain unchanged.
3. This Corrigendum is also uploaded for display on the websites http://www.ppra.org.pk and http://www.sbp.org.pk.

Senior Joint Director
Procurement Division I (IT), General Services Department, State Bank of Pakistan (SBP BSC)
4th Floor BSC House, I.I Chundrigar Road, Karachi -74000
Phone: (92-21)–32455948 & 32455482, Facsimile :(92-21)-99221176
Email: gsd.proc@sbp.org.pk Website: www.sbp.org.pk

SBP Banking Services Corporation
Section I. Invitation to Bids (ITB)

GSD (PROC-I)/186615/Supply/CMS/2024
Date: 30 December 2024

1. This Invitation to Bids follows the Procurement Advertisement (PA) No. *GSD (PROC-I)/186615/Supply/CMS/2024* for the acquisition of *Supply, Installation, Implementation, Integration, Configuration and Technical Support of Currency Management System.*

2. The SBP Banking Services Corporation has reserved the funds for the procurement planned during the financial year FY 2024-25. It is intended that part of the proceeds of the fund will be used to cover eligible payment under the contract for the procurement.

3. Procuring Agency now invites sealed bids from eligible bidders that meet the following eligibility criteria:-
   a) Bidder must be a Principal Software Firm (PSF) or an Authorized Partner of the PSF;
   b) Bidder must have experience of at least 03 (three) implementations of Designing, Developing & Implementing Enterprise Level Software Solutions of comparable scale during last 10 (ten) years;
   c) Bidder must have strength of at least 02 (two) Certified Project Management Professionals, 02 (two) Business Analysts and 10 (ten) Technical / Functional Resources with minimum experience of 05 (five) years of the quoted software development framework;
   d) Bidder must have a verifiable service/support office in Karachi;
   e) Bidder must have Annual Sales Volume/Gross Turnover of at least PKR 500 Million in any of last 03 (three) years;
   f) Bidder must be registered with Income Tax and Sales Tax Departments and must appear on Active Taxpayer List of FBR Pakistan;
   g) Bidder must not have been blacklisted or be in breach of performance with SBP or any Organization(s).

4. The bidding shall be conducted in line with the Single Stage Two Envelope Procedure of the Public Procurement Rules 2004 and any Regulations, Regulatory Guides, Procurement Guidelines or Instructions issued by the Authority (from time to time) and is open to all potential bidders.

5. All bids must be accompanied by a Bid Security in an acceptable form amounting to PKR 5 Million.

6. This ITB/Bidding Documents is also available on the websites: https://www.ppra.org.pk and https://www.sbp.org.pk.

7. The original bid along with one (01) copy, properly filled in, and enclosed in sealed envelope(s) must be delivered at the office of the undersigned on or before **Friday, 7 February 2025 11:00 AM.** The bids (technical part of the bids) will be opened same day at **11:30 AM** in public and in the presence of bidders' representatives who choose to attend in the opening at the **Meeting Room, General Services Department 4th Floor BSC House, State Bank of Pakistan Banking Services Corporation, I.I Chundrigar Road, Karachi –Pakistan**.

Senior Joint Director
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4th Floor BSC House, I.I Chundrigar Road, Karachi
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SECTION II: INSTRUCTION TO BIDDERS (ITBs)

A. INTRODUCTION

1. *Scope of Bid*	***1.1***	The Procuring Agency (PA), as indicated in the **Bid Data Sheet** (BDS) invites Bids for the *Supply, Development, Implementation, Integration and Technical Support of Currency Management System* as specified in the BDS and **Section V - Technical Specifications & Schedule of Requirements**. The successful Bidders will be expected to supply and install the information systems within the specified period and timeline(s) as stated in the **BDS**.
	1.2	Unless otherwise stated throughout this document definitions and interpretations shall be as prescribed in the General Conditions of the Contract (GCC).
2. *Source of Funds*	***2.1***	Source of funds is referred in Clause-2 of Invitation for Bids.
3. *Eligible Bidders*	***3.1***	A Bidder may be natural person, company or firm or public or semi-public agency of Pakistan or any foreign country**,** or any combination of them with a formal existing agreement (on Judicial Papers) in the form of a joint venture, consortium, or association. In the case of a joint venture, consortium, or association, all members shall be jointly and severally liable for the execution of the Contract in accordance with the terms and conditions of the Contract. The joint venture, consortium, or association shall nominate a Lead Member as nominated in the BDS, who shall have the authority to conduct all business for and on behalf of any and all the members of the joint venture, consortium, or association during the Bidding process, and in case of award of contract, during the execution of contract.
	3.2	The appointment of Lead Member in the joint venture, consortium, or association shall be confirmed by submission of a valid Power of Attorney to the Procuring Agency.
	3.3	Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid.
	3.4	Any bid submitted by the joint venture, consortium or association shall indicate the part of proposed contract to be performed by each party and each party shall be evaluated (or post qualified if required) with respect to its contribution only, and the responsibilities of each party shall not be substantially altered without prior written approval of the Procuring Agency and in line with any instructions issued by the Authority.
	3.5	The invitation for Bids is open to all prospective supplier, manufacturers or authorized agents/dealers subject to any provisions of incorporation or licensing by the respective national incorporating agency or statutory body established for that particular trade or business.
	3.6 .	Foreign Bidders must be locally registered with the appropriate national incorporating body or the statutory body, before

		participating in the national/international competitive tendering with the exception of such procurements made by the foreign missions of Pakistan. For such purpose the bidder must have to initiate the registration process before the bid submission and the necessary evidence shall be submitted to the procuring agency along with their bid, however, the final award will be subject to the complete registration process.
	3.7	A Bidder shall not have a conflict of interest. All Bidders found to have a conflict of interest shall be disqualified. A Bidders may be considered to have a conflict of interest with one or more parties in this Bidding process, if they: a) are associated or have been associated in the past, directly or indirectly with a firm or any of its affiliates which have been engaged by the Procuring Agency to provide consulting services for the preparation of the design, specifications and other documents to be used for the procurement of the information systems to be procured under this Invitation for Bids. b) have controlling shareholders in common; or c) receive or have received any direct or indirect subsidy from any of them; or d) have the same legal representative for purposes of this Bid; or e) have a relationship with each other, directly or through common third parties, that puts them in a position to have access to information about or influence on the Bid of another Bidder, or influence the decisions of the Procuring Agency regarding this Bidding process; or f) Submit more than one Bid in this Bidding process.
	3.8	A Bidder may be ineligible if – (a) he is declared bankrupt or, in the case of company or firm, insolvent; (b) payments in favor of the Bidder is suspended in accordance with the judgment of a court of law other than a judgment declaring bankruptcy and resulting (in accordance with the national laws) in the total or partial loss of the right to administer and dispose of its property; (c) legal proceedings are instituted against such Bidder involving an order suspending payments and which may result, in accordance with the national laws, in a declaration of bankruptcy or in any other situation entailing the total or partial loss of the right to administer and dispose of the property; (d) the Bidder is convicted, by a final judgment, of any offence involving professional conduct; (e) the Bidder is blacklisted and hence debarred due to involvement in corrupt and fraudulent practices, or performance failure or due to breach of bid securing declaration.

		(f) The firm, supplier and contractor is blacklisted or debarred by a foreign country, international organization, or other foreign institutions for the period defined by them.
	3.9	Bidders shall provide to the Procuring Agency evidence of their eligibility, proof of compliance with the necessary legal requirements to carry out the contract effectively.
	3.10	Bidders shall provide such evidence of their continued eligibility to the satisfaction of the Procuring Agency, as the Procuring Agency shall reasonably request.
	3.11	Bidders shall submit proposals relating to the nature, conditions and modalities of sub-contracting wherever the sub-contracting of any elements of the contract amounting to the more than ten (10) percent of the Bid price is envisaged.
4. ***Eligible Information Systems***	***4.1***	For the purposes of these Bidding Documents, the Information System means all: a) the required information technologies, including all information processing and communications-related hardware, software, supplies, and consumable items that the Supplier is required to supply and install under the Contract, plus all associated documentation, and all other materials and goods to be supplied, installed, integrated, and made operational (collectively called "the Goods" in some clauses of the ITB); and **b)** the related software development, transportation, insurance, installation, customization, integration, commissioning, training, technical support, maintenance, repair, and other services necessary for proper operation of the Information System to be provided by the selected Bidder and as specified in the Contract.
	4.2	All Information System made up of goods and services to be supplied under the contract shall have their origin in eligible source countries, and all expenditures made under the contract will be limited to the supply and installation information systems. For purpose of this Bid, ineligible countries are stated in the section-4 titled as "Eligible Countries".
	4.3	For purposes of this Clause, "origin" means the place where the goods and services making Information System are produced in or supplied from. An Information System is deemed to be produced in a certain country when, in the territory of that country, through software development, manufacturing, or substantial or major assembly or integration of components, a commercially recognized product result that is substantially different in basic characteristic or in purpose or utility from its component.
	4.4	The nationality of the supplier that supplies and install the Information System shall not determine the origin of the goods.

	4.5	To establish the eligibility of the Goods and Services making Information System, Bidders shall fill the country-of-origin declarations included in the Form of Bid.
	4.6	If so required in the **BDS**, the Bidder shall demonstrate that it has been duly authorized for the supply and installation of Information System in Pakistan (or in respective country in case of procurement by the Pakistani Missions abroad), the Information System indicated in its Bid.
5. ***One Bid per Bidder***	***5.1***	A bidder shall submit only one Bid, in the same bidding process, either individually as a Bidder or as a member in a joint venture or any similar arrangement.
	5.2	No bidder can be a sub-contractor while submitting a Bid individually or as a member of a joint venture in the same Bidding process.
	5.3	A person or a firm cannot be a sub-contractor with more than one bidder in the same bidding process.
6. ***Cost of Bidding***	***6.1***	The Bidder shall bear all costs associated with the preparation and submission of its Bid, and the Procuring Agency shall in no case be responsible or liable for those costs, regardless of the conduct or outcome of the bidding process.

B. BIDDING DOCUMENTS

7. ***Contents of Bidding Documents***	7.1	The Contents of the Bidding Documents listed below should be read in conjunction with any addenda issued in accordance with ITB 9.2 include: **Section I -**Invitation for Bids (IFB) **Section II** Instructions to Bidders (ITBs) **Section III** Bid Data Sheet (BDS) **Section IV** Eligible Countries **Section V** Technical Specifications, Schedule of Requirements **Section VI** Forms – Bid **Section VII** General Conditions of Contract (GCC) **Section VIII** Special Conditions of Contract (SCC) **Section IX** Contract Forms
	7.2	The number of copies to be completed and returned with the Bid is specified in the **BDS.**
	7.3	The Procuring Agency is not responsible for the completeness of the Bidding Documents and their addenda, if they were not obtained directly from the Procuring Agency or the signed pdf transaction from downloaded from the website of the Procuring Agency. However, Procuring Agency shall place both the pdf and same editable transaction to facilitate the bidder for filling the forms.
	7.4	The Bidder is expected to examine all instructions, forms, terms and specifications in the Bidding Documents. Failure to furnish all the information required in the Bidding Documents will be at the Bidder's risk and may result in the rejection of his Bid.
8. ***Clarification of Bidding Documents, Pre-Bid Meeting and Site Visit***	8.1	A prospective Bidder requiring any clarification of the Bidding Documents may notify the Procuring Agency in writing or in electronic form that provides record of the content of communication at the Procuring Agency's address indicated in the **BDS.**
	8.2	The Procuring Agency will within three (3) working days after receiving the request for clarification, respond in writing or in electronic form to any request for clarification provided that such request is received not later than three (03) days prior to the deadline for the submission of Bids as prescribed in **ITB 23.1.** However, this clause shall not apply in case of alternate methods of Procurement.
	8.3	Copies of the Procuring Agency's response will be forwarded to all identified Prospective Bidders through an identified source of communication, including a description of the inquiry, but without identifying its source. In case of downloading of the Bidding Documents from the website of PA, the response of all such queries will also be available on the same link available at the website.
	8.4	Should the Procuring Agency deem it necessary to amend the Bidding Documents as a result of a clarification, it shall do so following the procedure under **ITB 9.**

	8.5	If indicated **in the BDS**, the Bidder's designated representative is invited at the Bidder's cost to attend a pre-Bid meeting at the place, date and time mentioned **in the BDS**. During this pre-Bid meeting, prospective Bidders may request clarification of the schedule of requirement, the Evaluation Criteria or any other aspects of the Bidding Documents.
	8.6	Minutes of the pre-Bid meeting, if applicable, including the text of the questions asked by Bidders, including those during the meeting (without identifying the source) and the responses given, together with any responses prepared after the meeting will be transmitted promptly to all prospective Bidders who have obtained the Bidding Documents. Any modification to the Bidding Documents that may become necessary as a result of the pre-Bid meeting shall be made by the Procuring Agency exclusively through the use of an Addendum pursuant to **ITB 9.** Non-attendance at the pre-Bid meeting will not be a cause for disqualification of a Bidder.
	8.7	The Bidder may wish to visit and examine the site or sites of the Information System and obtain for itself, at its own responsibility and risk, all information that may be necessary for preparing the bid and entering into the Contract. The costs of visiting the site or sites shall be at the Bidder's own expense.
	8.8	The Procuring Agency will arrange for the Bidder and any of its personnel or agents to gain access to the relevant site or sites, provided that the Bidder gives the Procuring Agency adequate notice of a proposed visit of at least seven (07) days. Alternatively, the Procuring Agency may organize a site visit or visits concurrently with the pre-bid meeting, as specified in the BDS for ITB Clause 8.5. Failure of a Bidder to make a site visit will not be a cause for its disqualification
	8.9	No site visits shall be arranged or scheduled after the deadline for the submission of the Bids and prior to the award of Contract.
9. ***Amendment of Bidding Documents***	9.1	Before the deadline for submission of Bids, the Procuring Agency for any reason, whether at its own initiative or in response to a clarification requested by a prospective Bidder or pre-bid meeting may modify the Bidding Documents by issuing addenda.
	9.2	Any addendum issued including the notice of any extension of the deadline shall be part of the Bidding Documents pursuant to **ITB 7.1** and shall be communicated in writing or in any identified electronic form that provide record of the content of communication to all the bidders who have obtained the Bidding Documents from the Procuring Agency. The Procuring Agency shall promptly publish the Addendum at the Procuring Agency's web page identified in the BDS: Provided that the bidder who had either already submitted their bid or handed over the bid to the courier prior to the issuance of any such addendum shall have the right to withdraw his already filed bid and

		submit the revised bid prior to the original or extended bid submission deadline.
	9.3	To give prospective Bidders reasonable time in which to take an addendum/corrigendum into account in preparing their Bids, the Procuring Agency may, at its discretion, extend the deadline for the submission of Bids: Provided that the Procuring Agency shall extend the deadline for submission of Bid, if such an addendum is issued within last three (03) days of the Bid submission deadline.

C. PREPARATION OF BIDS

10. ***Language of Bid***	10.1	The Bid prepared by the Bidder, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Procuring Agency shall be written in the English language unless otherwise specified in the B**DS.** Supporting documents and printed literature furnished by the Bidder may be in another language provided they are accompanied by an accurate translation of the relevant pages in the English language unless specified in the **BDS**, in which case, for purposes of interpretation of the Bidder, the translation shall govern.
11. ***Documents Constituting the Bid***	11.1	The Bid prepared by the Bidder shall constitute the following components: - a) Form of Bid and Bid Prices completed in accordance with **ITB 14 and 15;** b) Details of the Sample(s) where applicable and requested in the **BDS.** c) Documentary evidence established in accordance with ITB 13 that the Bidder is eligible and/or qualified for the subject bidding process; d) Documentary evidence established in accordance with **ITB 13.3(a)** that the Bidder has been authorized by the manufacturer to deliver the goods and services making Information System into Pakistan, where required and where the supplier is not the manufacturer of those goods and service making Information System; e) Documentary evidence established in accordance with I**TB 12** that the goods and services making Information System to be supplied by the Bidder are eligible, and conform to the Bidding Documents; f) Bid security or Bid Securing Declaration furnished in accordance with **ITB 18;** g) Duly Notarized Power of Attorney authorizing the signatory of the Bidder to submit the bid**;** and h) Any other document required in the **BDS**
12. ***Documents Establishing Eligibility of the Information System***	12.1	Pursuant to **ITB 11**, the Bidder shall furnish, as part of its Bid, all those documents establishing the eligibility in conformity to the terms and conditions specified in the Bidding Documents for all goods and services making information system which the Bidder proposes to deliver.

and Conformity to Bidding Documents	12.2	The documentary evidence of the eligibility of the Information System shall consist of a statement in the Price Schedule of the country of origin of the goods and services making Information System offered which shall be confirmed by a certificate of origin issued at the time of shipment.
	12.3	The documentary evidence of conformity of the goods and services making Information Systems to the Bidding Documents may be in the form of literature, drawings, and data, and shall consist of: a) a detailed description of the essential technical specifications and performance characteristics of the Goods; b) an item-by-item commentary on the Procuring Agency's Technical Specifications demonstrating substantial responsiveness of the Goods and Services to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications; c) any other procurement specific documentation requirement as stated in the **BDS**.
	12.4	For purposes of the commentary to be furnished pursuant to **ITB 12.3(c)** above, the Bidder shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procuring Agency in its Technical Specifications, are intended to be descriptive only and not restrictive. The Bidder may substitute alternative standards, brand names, and/or catalogue numbers in its Bid, provided that it demonstrates to the Procuring Agency's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.
	12.6	The required documents and other accompanying documents must be in English. In case any other language than English is used the pertinent translation into English shall be attached to the original version.
13. ***Documents Establishing Eligibility and Qualification of the Bidder***	13.1	Pursuant to **ITB 11,** the Bidder shall furnish, as part of its Bid, all those documents establishing the Bidder's eligibility to participate in the bidding process and/or its qualification to perform the contract if its Bid is accepted.
	13.2	The documentary evidence of the Bidder's eligibility to Bid shall establish to the satisfaction of the Procuring Agency that the Bidder, at the time of submission of its bid, is from an eligible country as defined in Section-4 titled as "Eligible Countries".
	13.3	The documentary evidence of the Bidder's qualifications to perform the contract if its Bid is accepted shall establish to the satisfaction of Procuring Agency that: a) in the case of a Bidder offering to supply and install Information System under the contract which the Bidder did not manufacture or otherwise produce, the Bidder has been duly authorized by the

		Manufacturer or producer to supply and install the information system in Pakistan; b) the Bidder has the financial, technical, and supply/production capability necessary to perform the Contract, meets the qualification criteria specified in **BDS**. c) in the case of a Bidder not doing business within Pakistan, the Bidder is or will be (if awarded the contract) represented by an Agent in Pakistan equipped, and able to carry out the Supplier's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications. d) that the Bidder meets the qualification criteria listed in the Bid Data Sheet.
	13.4	The documentary evidence of conformity of the Information System to the Bidding Documents shall be in the form of written descriptions, literature, diagrams, certifications, and client references, including: a) the Bidder's technical bid, i.e., a detailed description of the Bidder's proposed technical solution conforming in all material aspects with the Technical Requirements and other parts of these Bidding Documents, overall as well as in regard to the essential technical and performance characteristics of each component making up the proposed Information System; b) an item-by-item commentary on the Procuring Agency's Technical Requirements, demonstrating the substantial responsiveness of the Information System offered to those requirements. In demonstrating responsiveness, the commentary shall include explicit cross references to the relevant pages in the supporting materials included in the bid. Whenever a discrepancy arises between the item-by-item commentary and any catalogs, technical specifications, or other preprinted materials submitted with the bid, the item-by-item commentary shall prevail; c) Preliminary Project Plan describing, among other things, the methods by which the Bidder will carry out its overall management and coordination responsibilities if awarded the Contract, and the human and other resources the Bidder proposes to use. The Plan should include a detailed Contract Implementation Schedule in bar chart form, showing the estimated duration, sequence, and interrelationship of all key activities needed to complete the Contract. The Preliminary Project Plan must also address any other topics specified in the BDS. In addition, the Preliminary Project Plan should state the Bidder's assessment of what it expects the Procuring Agency and any other party involved in the implementation of the Information System to provide during implementation and how the Bidder proposes to coordinate the activities of all involved parties; d) a written confirmation that the Bidder accepts responsibility for the successful integration and inter-operability of all components of the Information System as required by the Bidding Documents.

14. ***Form of Bid***	14.1	The Bidder shall fill the Form of Bid furnished in the Bidding Documents. The Bid Form must be completed without any alterations to its format and no substitute shall be accepted.
15. ***Bid Prices***	15.1	The Bid Prices and discounts quoted by the Bidder in the Form of Bid and in the Price Schedules shall conform to the requirements specified below in ITB Clause 15 or exclusively mentioned hereafter in the bidding documents.
	15.2	All items in the Schedule of requirement must be listed and priced separately in the Price Schedule(s). If a Price Schedule shows items listed but not priced, their prices shall be construed to be included in the prices of other items.
	15.3	Items not listed in the Price Schedule shall be assumed not to be included in the Bid, and provided that the Bid is still substantially responsive in their absence or due to their nominal nature, the corresponding average price of the respective item(s) of the remaining substantially responsive bidder(s) shall be construed to be the price of those missing item(s): Provided that: a) where there is only one (substantially) responsive bidder, or b) where there is provision for alternate proposals and the respective items are not listed in the other bids, the procuring agency may fix the price of missing items in accordance with market survey, and the same shall be considered as final price.
	15.4	The Bid price to be quoted in the Form of Bid in accordance with **ITB 15.1** shall be the total price of the Bid, excluding any discounts offered.
	15.5	The Bidder shall indicate on the appropriate Price Schedule, the unit prices (where applicable) and total Bid price of the goods it proposes to deliver under the contract.
	15.6	Prices indicated on the Price Schedule shall be entered separately in the following manner: a) For goods manufactured from within Pakistan (or within the country where procurement is being done in case of foreign missions abroad): i) the price of the goods quoted EXW (ex-works, ex-factory, ex-warehouse, ex-showroom, or off-the-shelf, as applicable), including all customs duties and sales and other taxes already paid or payable: A. on the components and raw material used in the manufacturing or assembly of goods quoted ex- works or ex-factory; or B. on the previously imported goods of foreign origin quoted ex-warehouse, ex-showroom, or off-the-shelf. ii) all applicable taxes which will be payable on the goods if the contract is awarded.

		iii) the price for inland transportation, insurance, and other local costs incidental to delivery of the goods to their final destination, if specified in the **BDS.** iv) the price of other (incidental or allied) services, if any, listed in the **BDS**. b) For goods offered from abroad: i) the price of the goods shall be quoted CIF named port of destination, or CIP border point, or CIP named place of destination, in the Procuring Agency's country, as specified in the **BDS**. In quoting the price, the Bidder shall be free to use transportation through carriers registered in any eligible countries. Similarly, the Bidder may obtain insurance services from any eligible source country. or ii) the price of the goods quoted FOB port of shipment (or FCA, as the case may be), if specified in the **BDS**. or iii) the price of goods quoted CFR port of destination (or CPT as the case may be), if specified in the **BDS.** iv) the price for inland transportation, insurance, and other local costs incidental to delivery of the goods from the port of entry to their final destination, if specified in the **BDS**. v) the price of (incidental) services, if any, listed in the **BDS**.
	15.7	Prices proposed on the Price Schedule for goods and related services shall be disaggregated, where appropriate as indicated in this Clause. This desegregation shall be solely for the purpose of facilitating the comparison of Bids by the Procuring Agency. This, shall not in any way limit the Procuring Agency's right to contract on any of the terms and conditions offered: - a) **For Goods: -** i) the price of the Goods, quoted as per applicable INCOTERMS as specified in the **BDS** ii) all customs duties, sales tax, and other taxes applicable on goods or on the components and raw materials used in their manufacture or assembly, if the contract is awarded to the Bidder, and b) **For Related Services**

		i) The price of the related services, and ii) All customs duties, sales tax and other taxes applicable in Pakistan, paid or payable, on the related services, if the contract is awarded to the Bidder.
	15.8	Prices quoted by the Bidder shall be fixed during the Bidder's performance of the contract and not subject to variation on any account. A Bid submitted with an adjustable price will be treated as non-responsive and shall be rejected, pursuant to **ITB 29**.
	15.9	If so indicated in the Invitation to Bids and Instructions to Bidders, that Bids are being invited for individual contracts (Lots) or for any combination of contracts (packages), Bidders wishing to offer any price reduction for the award of more than one contract shall specify in their Bid the price reductions applicable to each package, or alternatively, to individual contracts (Lots) within a package.
16. ***Bid Currencies***	16.1	Prices shall be quoted in the following currencies: a) For goods and services that the Bidder will deliver from within Pakistan, the prices shall be quoted in Pakistani Rupees, unless otherwise specified in the **BDS.** b) For goods and related services that the Bidder will deliver from outside Pakistan, or for imported parts or components of goods and related services originating outside Pakistan, the Bid prices shall be quoted in any freely convertible currency of another country.
	16.2	For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of (financial part of) bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day.
	16.3	The Currency of the Contract shall be Pakistani Rupee unless otherwise stated in the BDS.
17. ***Bid Validity Period***	17.1	Bids shall remain valid for the period specified in the **BDS** after the Bid submission deadline prescribed by the Procuring Agency. A Bid valid for a shorter period shall be rejected by the Procuring Agency as non-responsive**.** The period of Bid validity will be determined from the complementary bid securing instrument i.e., the expiry period of bid security or bid securing declaration as the case may be.
	17.2	Under exceptional circumstances, prior to the expiration of the initial Bid validity period, the Procuring Agency may request the Bidders' consent to an extension of the period of validity of their Bids only once, for the period not more than the period of initial bid validity. The request and the Bidders responses shall be made in writing or in electronic forms that provide record of the content of communication. The Bid Security provided under **ITB 18** shall also be suitably extended. A Bidder may refuse the request without forfeiting its Bid security or causing to be executed its Bid Securing Declaration. A Bidder agreeing to the request

		will not be required nor permitted to modify its Bid, but will be required to extend the validity of its Bid Security or Bid Securing Declaration for the period of the extension, and in compliance with **ITB 18** in all respects.
	17.3	If the award is delayed by a period exceeding sixty (60) days beyond the expiry of the initial Bid validity period, the contract price may be adjusted by a factor specified in the request for extension. However, the Bid evaluation shall be based on the already quoted Bid Price without taking into consideration on the above correction.
18. ***Bid Security or Bid Securing Declaration***	18.1	Pursuant to **ITB 11**, unless otherwise specified in the **BDS**, the Bidder shall furnish as part of its Bid, a Bid Security in form of fixed amount not exceeding five percent of the estimated value of procurement determined by the procuring agency and in the amount and currency specified in the **BDS** or Bid Securing Declaration as specified in the **BDS** in the format provided in **Section VI (Standard Forms)**.
	18.2	The Bid Security or Bid Securing Declaration is required to protect the Procuring Agency against the risk of Bidder's conduct which would warrant the security's forfeiture, pursuant to **ITB 18.9.**
	18.3	The Bid Security shall be denominated in the local currency or in another freely convertible currency, and it shall be in the form specified in the **BDS** which shall be in any of the following: a) a bank guarantee, an irrevocable letter of credit issued by a Scheduled bank in the form provided in the Bidding Documents or another form acceptable to the Procuring Agency and valid for twenty-eight (28) days beyond the end of the validity of the Bid. This shall also apply if the period for Bid Validity is extended. In either case, the form must include the complete name of the Bidder; b) a cashier's or certified cheque; or c) another security if indicated in the **BDS**
	18.4	The Bid Security or Bid Securing Declaration shall be in accordance with the Form of the Bid Security or Bid Securing Declaration included in **Section VI (Standard Forms)** or another form approved by the Procuring Agency prior to the Bid submission.
	18.5	The Bid Security shall be payable promptly upon written demand by the Procuring Agency in case any of the conditions listed in **ITB 18.9** are invoked.
	18.6	Any Bid not accompanied by a Bid Security or Bid Securing Declaration in accordance with **ITB 18.1 or 18.3** shall be rejected by the Procuring Agency as non-responsive, pursuant to **ITB 29**.
	18.7	Unsuccessful Bidders' Bid Security will be discharged or returned as promptly as possible, however in no case later than thirty (30) days after the expiration of the period of Bid Validity prescribed by the Procuring Agency pursuant to **ITB 17**. The Procuring Agency shall make no claim to the amount of the Bid Security, and shall promptly return the Bid Security document, after whichever of the following that occurs earliest:

		(a) the expiry of the Bid Security; (b) the entry into force of a procurement contract and the provision of a performance security (or guarantee), for the performance of the contract if such a security (or guarantee), is required by the Biding documents; (c) the rejection by the Procuring Agency of all Bids; (d) the withdrawal of the Bid prior to the deadline for the submission of Bids, unless the Biding documents stipulate that no such withdrawal is permitted.
	18.8	The successful Bidder's Bid Security will be discharged upon the Bidder signing the contract pursuant to **ITB 42,** or furnishing the performance guarantee, pursuant to **ITB 43**.
	18.9	The Bid Security may be forfeited or the Bid Securing Declaration executed: a) if a Bidder: i) withdraws its Bid during the period of Bid Validity as specified by the Procuring Agency, and referred by the bidder on the Form of Bid except as provided for in **ITB 17.2**; or ii) does not accept the correction of errors pursuant to **ITB 31.2;** or b) in the case of a successful Bidder, if the Bidder fails: i) to sign the contract in accordance with **ITB 42**; or ii) to furnish performance security (or guarantee) in accordance with **ITB 43.**
19. ***Alternative Bids by Bidders***	19.1	Bidders shall submit offers that comply with the requirements of the Bidding Documents, including the basic Bidder's technical design as indicated in the specifications and Schedule of Requirements. Alternatives will not be considered, unless specifically allowed for in the **BDS**. If so allowed, **ITB 19.2** shall prevail.
	19.2	When alternative schedule for supply and installation of Information System is explicitly invited, a statement of that effect will be included in the **BDS** as will the method for evaluating different schedule for Information System.
	19.3	If so allowed in the **BDS**, Bidders wishing to offer technical alternatives to the requirements of the Bidding Documents must also submit a Bid that complies with the requirements of the Bidding Documents, including the basic technical design as indicated in the specifications. In addition to submitting the basic Bid, the Bidder shall provide all

		information necessary for a complete evaluation of the alternative by the Procuring Agency, including technical specifications, breakdown of prices, and other relevant details. Only the technical alternatives, if any, of the Most Advantageous Bidder conforming to the basic technical requirements (without altering the bid price) shall be considered by the Procuring Agency.
20. ***Withdrawal, Substitution, and Modification of Bids***	20.1	Before bid submission deadline, any bidder may withdraw, substitute, or modify its Bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and the corresponding substitution or modification must accompany the respective written notice.
	20.2	Bids requested to be withdrawn in accordance with **ITB 20.1** shall be returned unopened to the Bidders.
21. ***Format and Signing of Bid***	21.1	The Bidder shall prepare an original and the number of copies of the Bid as indicated in the **BDS**, clearly marking each "ORIGINAL" and "COPY," as appropriate. In the event of any discrepancy between them, the original shall prevail: Provided that except in Single Stage One Envelope Procedure, the Bid shall include only the copies of technical proposal.
	21.2	The original and the copy or copies of the Bid shall be typed or written in indelible ink and shall be signed by the Bidder or a person or persons duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation as specified in the **BDS** and shall be attached to the Bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Bid, except for un-amended printed literature, shall be initialed by the person or persons signing the Bid.
	21.3	Any interlineations, erasures, or overwriting shall be valid only if they are signed by the person or persons signing the Bidder.

D. SUBMISSION OF BIDS

22. ***Sealing and Marking of Bids***	22.1	In case of Single Stage One Envelope Procedure, the Bidder shall seal the original and each copy of the Bid in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope securely sealed in such a manner that opening and resealing cannot be achieved undetected. **Note:** *The envelopes shall be sealed and marked in accordance with the bidding procedure adopted as referred in Rule-36 of PPR-2004.*
	22.2	The inner and outer envelopes shall: a) be addressed to the Procuring Agency at the address given in the **BDS**; and b) bear the title of the subject procurement or Project name, as the case may be as indicated in the **BDS**, the Invitation to Bids (ITB) title and number indicated in the **BDS**, and a statement: "DO NOT OPEN BEFORE," to be completed with the time and the date specified in the **BDS**, pursuant to **ITB 23.1.**
	22.3	In case of Single Stage Two Envelope Procedure, The Bid shall comprise two envelopes submitted simultaneously, one called the Technical Proposal and the other Financial Proposal. Both envelopes to be enclosed together in an outer single envelope called the Bid. Each Bidder shall submit his bid as under: a)Bidder shall submit his TECHNICAL PROPOSAL and FINANCIAL PROPOSAL in separate inner envelopes and enclosed in a single outer envelope. b) ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such. c)(c) The envelopes containing the ORIGINAL and copies will be put in one sealed envelope and addressed / identified as given in Sub- Clause 21.2.
	22.4	The inner and outer envelopes shall: a)be addressed to the Procuring Agency at the address provided in the Bidding Data; b) bear the name and identification number of the contract as defined in the Bidding Data; and provide a warning not to open before the time and date for bid opening, as specified in the Bidding Data. pursuant to **ITB 23.1.** c)In addition to the identification required in Sub- Clause 21.2 hereof, the inner envelope shall indicate the name and address of the bidder to enable the bid to be returned unopened in case it is declared "late" pursuant to Clause IB.24
		If all envelopes are not sealed and marked as required by **ITB 22.2**, **ITB 22.3** and **ITB 22.4** or incorrectly marked, the Procuring Agency will assume no responsibility for the misplacement or premature opening of Bid.

23. ***Deadline for Submission of Bids***	23.1	Bids shall be received by the Procuring Agency no later than the date and time specified in the **BDS.**
	23.2	The Procuring Agency may, in exceptional circumstances and at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with **ITB 9**, in which case all rights and obligations of the Procuring Agency and Bidders previously subject to the deadline will thereafter be subject to the new deadline.
24. ***Late Bids***	24.1	The Procuring Agency shall not consider for evaluation any Bid that arrives after the deadline for submission of Bids, in accordance with **ITB 23**.
	24.2	Any Bid received by the Procuring Agency after the deadline for submission of Bids shall be declared late, recorded, rejected and returned unopened to the Bidder.
25. ***Withdrawal, Substitution, and Modification of Bids***	25.1	A Bidder may withdraw, substitute, or modify its bid after submission, provided that written notice of the withdrawal, substitution, or modification is received by the Procuring Agency prior to the deadline prescribed for bid submission. All notices must be duly signed by an authorized representative and shall include a copy of the authorization (the power of attorney).
	25.2	The Bidder modification, substitution or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of ITB Clauses 21 and 22 with the outer and inner envelopes additionally marked "MODIFICATION", "SUBSTITUTION" OR "WITHDRAWAL" as appropriate. The notice may also be sent by electronic, telex and facsimile, but followed by a signed confirmation copy, postmarked no later than the deadline for submission of Bids.
	25.3	Bids may only be modified by withdrawal of the original Bids and submission of a replacement Bid in accordance with sub-Clause 25.1. Modifications submitted in any other way shall not be taken into account in the evaluation of Bids.
	25.4	Bidders may only offer discounts to or otherwise modify the prices of their Bids by substituting Bid modifications in accordance with this clause or included in the original bid submission.
	25.5	No Bid may be withdrawn, replaced or modified in the interval between the deadline for submission of Bids and the expiration of the period of Bid validity specified by the Bidder on the Form of Bid. Withdrawal of a Bid during this interval shall result in the Bidders forfeiture of its Bid Security or execution of the Bid Securing Declaration.
	25.6	Revised bid may be submitted after the withdrawal of the original bid in accordance with the provisions referred in ITB 25.

E. OPENING AND EVALUATION OF BIDS

26. ***Opening of Bids***	26.1	The Procuring Agency will open all Bids, in public, in the presence of Bidders' or their representatives who choose to attend, and other parties with a legitimate interest in the Bid proceedings at the place, on the date and at the time, specified in the **BDS**. The Bidders' representatives present shall sign a register as proof of their attendance.
	26.2	First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding Withdrawal Notice contains a valid authorization to request the withdrawal and is read out at bid opening.
	26.3	Second, outer envelopes marked "SUBSTITUTION" shall be opened. The inner envelopes containing the Substitution Bid shall be exchanged for the corresponding Original Bid being substituted, which is to be returned to the Bidder unopened. No envelope shall be substituted unless the corresponding Substitution Notice contains a valid authorization to request the substitution and is read out and recorded at bid opening.
	26.4	Next, outer envelopes marked "MODIFICATION" shall be opened. No Technical Proposal and/or Financial Proposal shall be modified unless the corresponding Modification Notice contains a valid authorization to request the modification and is read out and recorded at the opening of the Bids. Any Modification shall be read out along with the Original Bid except in case of Single Stage Two Envelope Procedure where only the Technical Proposal, both Original as well as Modification, are to be opened, read out, and recorded at the opening. Financial Proposal, both Original and Modification, will remain unopened till the prescribed financial bid opening date.
	26.5	Other envelopes holding the Bids shall be opened one at a time, in case of Single Stage One Envelope Procedure, the Bidders names, the Bid prices, the total amount of each Bid and of any alternative Bid (if alternatives have been requested or permitted), any discounts, the presence or absence of Bid Security, Bid Securing Declaration and such other details as the Procuring Agency may consider appropriate, will be announced by the Procurement Evaluation Committee.
	26.6	In case of Single Stage Two Envelope Procedure, the Procuring Agency will open the Technical Proposals in public at the address, date and time specified in the **BDS** in the presence of Bidders` designated representatives who choose to attend and other parties with a legitimate interest in the Bid proceedings. The Financial Proposals will remain unopened and will be held in custody of the Procuring Agency until the specified time of their opening.
	26.7	The envelopes holding the Technical Proposals shall be opened one at a time, and the following read out and recorded: (a) the name of the Bidder; (b) whether there is a modification or substitution; (c) the

		presence of a Bid Security, if required; and (d) Any other details as the Procuring Agency may consider appropriate.
	26.8	Bids not opened and not read out at the Bid opening shall not be considered further for evaluation, irrespective of the circumstances. In particular, any discount offered by a Bidder which is not read out at Bid opening shall not be considered further.
	26.9	Bidders are advised to send in a representative with the knowledge of the content of the Bid who shall verify the information read out from the submitted documents. Failure to send a representative or to point out any un-read information by the sent Bidder's representative shall indemnify the Procuring Agency against any claim or failure to read out the correct information contained in the Bidder's Bid.
	26.10	No Bid will be rejected at the time of Bid opening except for late Bids which will be returned unopened to the Bidder, pursuant to **ITB 24.**
	26.11	The Procuring Agency shall prepare minutes of the Bid opening. The record of the Bid opening shall include, as a minimum: the name of the Bidder and whether or not there is a withdrawal, substitution or modification, the Bid price if applicable, including any discounts and alternative offers and the presence or absence of a Bid Security or Bid Securing Declaration.
	26.12	The Bidders' representatives who are present shall be requested to sign on the attendance sheet. The omission of a Bidder's signature on the record shall not invalidate the contents and affect the record. A copy of the record shall be distributed to all the Bidders.
	26.13	A copy of the minutes of the Bid opening shall be furnished to individual Bidders upon request.
	26.14	In case of Single Stage Two Envelop Bidding Procedure, after the evaluation and approval of technical proposal the procuring agency, shall at a time within the bid validity period, publically open the financial proposals of the technically accepted bids only. The financial proposal of bids found technically non-responsive shall be returned un-opened to the respective bidders subject to redress of the grievances from all tiers of grievances.
27. *Confidentiality*	27.1	Information relating to the examination, clarification, evaluation and comparison of Bids and recommendation of contract award shall not be disclosed to Bidders or any other persons not officially concerned with such process until the time of the announcement of the respective evaluation report.
	27.2	Any effort by a Bidder to influence the Procuring Agency processing of Bids or award decisions may result in the rejection of its Bid.
	27.3	Notwithstanding **ITB 27.2** from the time of Bid opening to the time of contract award, if any Bidder wishes to contact the Procuring Agency on any matter related to the Bidding process, it should do so in writing or in electronic forms that provides record of the content of communication.
28. *Clarification of Bids*	28.1	To assist in the examination, evaluation and comparison of Bids of the Bidders, the Procuring Agency may, ask any Bidder for a clarification.

		Any clarification submitted by a Bidder that is not in response to a request by the Procuring Agency shall not be considered.
	28.2	The request for clarification and the response shall be in writing or in electronic forms that provide record of the content of communication. In case of Single Stage Two Envelope Procedure, no change in the prices or substance of the Bid shall be sought, offered, or permitted, whereas in case of Single Stage One Envelope Procedure, only the correction of arithmetic errors discovered by the Procuring Agency in the evaluation of Bids should be sought in accordance with **ITB 31**.
	28.3	The alteration or modification in THE BID which in any affect the following parameters will be considered as a change in the substance of a bid: a) evaluation & qualification criteria; b) required scope of work or specifications; c) all securities requirements; d) tax requirements; e) terms and conditions of bidding documents. f) change in the ranking of the bidder
	28.4	From the time of Bid opening to the time of Contract award if any Bidder wishes to contact the Procuring Agency on any matter related to the Bid it should do so in writing or in electronic forms that provide record of the content of communication.
29. *Preliminary Examination of Bids*	29.1	Prior to the detailed evaluation of Bids, the Procuring Agency will determine whether each Bid: a) meets the eligibility criteria defined in **ITB 3** and **ITB 4**; b) has been prepared as per the format and contents defined by the Procuring Agency in the Bidding Documents; c) has been properly signed; d) is accompanied by the required securities; and e) is substantially responsive to the requirements of the Bidding Documents. The Procuring Agency's determination of a Bid's responsiveness will be based on the contents of the Bid itself.
	29.2	A substantially responsive Bid is one which conforms to all the terms, conditions, and specifications of the Bidding Documents, without material deviation or reservation. A material deviation or reservation is one that: - a) affects in any substantial way the scope, quality, or performance of the Services;

		b) limits in any substantial way, inconsistent with the Bidding Documents, the Procuring Agency's rights or the Bidders obligations under the Contract; or c) if rectified, would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.
	29.3	The Procuring Agency will confirm that the documents and information specified under **ITB 11, 12** and **13** have been provided in the Bid. If any of these documents or information is missing, or is not provided in accordance with the Instructions to Bidders, the Bid shall be rejected.
	29.4	The Procuring Agency may waive off any minor informality, nonconformity, or irregularity in a Bid which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any Bidder. ***Explanation:*** *A minor informality, non-conformity or irregularity is one that is merely a matter of form and not of substance. It also pertains to some immaterial defect in a Bid or variation of a bid from the exact requirements of the invitation that can be corrected or waived without being prejudicial to other bidders. The defect or variation is immaterial when the effect on quantity, quality, or delivery is negligible when contrasted with the total cost or scope of the supplies or services being acquired. The Procuring Agency either shall give the bidder an opportunity to cure any deficiency resulting from a minor informality or irregularity in a bid or waive the deficiency, whichever is advantageous to the Procuring Agency. Examples of minor informalities or irregularities include failure of a bidder to –* (a) *Submit the number of copies of signed bids required by the invitation;* (b) *Furnish required information concerning the number of its employees;* (c) *the firm submitting a bid has formally adopted or authorized, before the date set for opening of bids, the execution of documents by typewritten, printed, or stamped signature and submits evidence of such authorization and the bid carries such a signature.*
	29.5	Provided that a Technical Bid is substantially responsive, the Procuring Agency may request the Bidder to submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities or omissions in the Technical Bid related to documentation requirements. Requesting information or documentation on such nonconformities shall not be related to any such aspect of the technical Proposal linked with the ranking of the

		bidders. Failure of the Bidder to comply with the request may result in the rejection of its Bid.
	29.6	Provided that a Technical Bid is substantially responsive, the Procuring Agency shall rectify quantifiable nonmaterial nonconformities or omissions related to the Financial Proposal. To this effect, the Bid Price shall be adjusted, for comparison purposes only, to reflect the price of the missing or nonconforming item or component.
	29.7	If a Bid is not substantially responsive, it will be rejected by the Procuring Agency and may not subsequently be evaluated for complete technical responsiveness.
30. ***Examination of Terms and Conditions; Technical Evaluation***	30.1	The Procuring Agency shall examine the Bid to confirm that all terms and conditions specified in the **GCC** and the **SCC** have been accepted by the Bidder without any material deviation or reservation.
	30.2	The Procuring Agency shall evaluate the technical aspects of the Bid submitted in accordance with **ITB 22,** to confirm that all requirements specified in **Section V – Schedule of Requirements**, **Technical Specifications of** the Bidding Documents have been met without material deviation or reservation.
	30.3	If after the examination of the terms and conditions and the technical evaluation, the Procuring Agency determines that the Bid is not substantially responsive in accordance with **ITB 29,** it shall reject the Bid.
31. ***Correction of Errors***	31.1	Bids determined to be substantially responsive will be checked for any arithmetic errors. Errors will be corrected as follows: - a) if there is a discrepancy between unit prices and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected, unless in the opinion of the Procuring Agency there is an obvious misplacement of the decimal point in the unit price, in which the total price as quoted shall govern and the unit price shall be corrected; b) if there is an error in a total corresponding to the addition or subtraction of sub-totals, the sub-totals shall prevail and the total shall be corrected; and c) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern. d) Where there is discrepancy between grand total of price schedule and amount mentioned on the Form of Bid, the amount referred in Price Schedule shall be treated as correct subject to elimination of other errors.
	31.2	The amount stated in the Bid will, be adjusted by the Procuring Agency in accordance with the above procedure for the correction of

		errors and, with, the concurrence of the Bidder, shall be considered as binding upon the Bidder. If the Bidder does not accept the corrected amount, its Bid will then be rejected, and the Bid Security may be forfeited or the Bid Securing Declaration may be executed in accordance with **ITB 18.9.**
32. ***Conversion to Single Currency***	32.1	To facilitate evaluation and comparison, the Procuring Agency will convert all Bid prices expressed in the amounts in various currencies in which the Bid prices are payable. For the purposes of comparison of bids quoted in different currencies, the price shall be converted into a single currency specified in the bidding documents. The rate of exchange shall be the selling rate, prevailing on the date of opening of (financial part of) bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day.
	32.2	The currency selected for converting Bid prices to a common base for the purpose of evaluation, along with the source and date of the exchange rate, are specified in the **BDS**.
33. ***Evaluation of Bids***	33.1	The Procuring Agency shall evaluate and compare only the Bids determined to be substantially responsive, pursuant to **ITB 29**.
	33.2	In evaluating the Technical Proposal of each Bid, the Procuring Agency shall use the criteria and methodologies listed in the BDS and in terms of Statement of Requirements and Technical Specifications. No other evaluation criteria or methodologies shall be permitted.
	33.2	The Procuring Agency's evaluation of a Bid will take into account: a) in the case of goods manufactured in Pakistan or goods of foreign origin already imported in Pakistan, Income Tax, General Sales Tax and other similar/applicable taxes, which will be payable on the goods if a contract is awarded to the Bidder; b) in the case of goods of foreign origin offered from abroad, customs duties and other similar import taxes which will be payable on the goods if the contract is awarded to the Bidder; and
	33.3	The comparison shall be between the EXW price of the goods offered from within Pakistan, such price to include all costs, as well as duties and taxes paid or payable on components and raw material incorporated or to be incorporated in the goods, and named port of destination, border point, or named place of destination) in accordance with applicable INCOTERM in the price of the goods offered from outside Pakistan.

	33.4	In evaluating the Bidders, the evaluation committee will, in addition to the Bid price quoted in accordance with ITB 15.1, take account of one or more of the following factors as specified in the **BDS**, and quantified in ITB 32.5: a) Cost of inland transportation, insurance, and other costs within the Pakistan incidental to delivery of the goods to their final destination. b) delivery schedule offered in the Bid; c) deviations in payment schedule from that specified in the Special Conditions of Contract; d) the cost of components, mandatory spare parts, and service; e) the availability (in Pakistan) of spare parts and after-sales services for the equipment offered in the Bid; f) the projected operating and maintenance costs during the life of the equipment; g) the performance and productivity of the equipment offered; and/or h) other specific criteria indicated in the **BDS** and/or in the Technical Specifications.
	33.5	For factors retained in **BDS**, pursuant to ITB 33.4 one or more of the following quantification methods will be applied, as detailed in the **BDS**: *(a) Inland transportation from EXW/port of entry/border point, Insurance and incidentals.* Inland transportation, insurance, and other incidental costs for delivery of the goods from EXW/port of entry/border point to Project Site named in the **BDS** will be computed for each Bid by the PA on the basis of published tariffs by the rail or road transport agencies, insurance companies, and/or other appropriate sources. To facilitate such computation, Bidder shall furnish in its Bid the estimated dimensions and shipping weight and the approximate EXW or as per applicable INCOTERM value of each package. The above cost will be added by the Procuring Agency to EXW or as per applicable INCOTERM price. *(b) Delivery schedule.* i) The Procuring Agency requires that the goods under the Invitation for Bids shall be delivered (shipped) at the time specified in the Schedule of Requirements. The

estimated time of arrival of the goods at the Project Site will be calculated for each Bid after allowing for reasonable international and inland transportation time. Treating the Bid resulting in such time of arrival as the base, a delivery "adjustment" will be calculated for other Bids by applying a percentage, specified in the **BDS**, of the EXW or as per applicable INCOTERM price for each week of delay beyond the base, and this will be added to the Bid price for evaluation. No credit shall be given to early delivery.

Or

ii) The goods covered under this invitation are required to be delivered (shipped) within an acceptable range of weeks specified in the Schedule of Requirement. **No credit will be given to earlier deliveries, and Bids offering delivery beyond this range will be treated as non-responsive.** Within this acceptable range, an adjustment per week, as specified in the **BDS**, will be added for evaluation to the Bid price of Bids offering deliveries later than the earliest delivery period specified in the Schedule of Requirements.

Or

(iii) The goods covered under this invitation are required to be delivered (shipped) in partial shipments, as specified in the Schedule of Requirements. Bids offering deliveries earlier or later than the specified deliveries will be adjusted in the evaluation by adding to the Bid price a factor equal to a percentage, specified in the **BDS**, of EXW or as per applicable INCOTERM price per week of variation from the specified delivery schedule.

(c) *Deviation in payment schedule.*

i) Bidders shall state their Bid price for the payment schedule outlined in the **SCC.** Bids will be evaluated on the basis of this base price. Bidders are, however, permitted to state an alternative payment schedule and indicate the reduction in Bid price they wish to offer for such alternative payment schedule. The Procuring Agency may consider the alternative payment schedule offered by the selected Bidder.

Or

ii) The **SCC** stipulates the payment schedule offered by the Procuring Agency. If a Bid deviates from the schedule and if such deviation is considered acceptable to the Procuring Agency, the Bid will be evaluated by calculating interest earned for any earlier payments involved in the terms outlined in the Bid as compared with those stipulated in this invitation, at the rate per annum specified in the **BDS.**

(d) Cost of spare parts

i) The list of items and quantities of major assemblies, components, and selected spare parts, likely to be required during the initial period of operation specified in the **BDS**, is annexed to the Technical Specifications. The total cost of these items, at the unit prices quoted in each Bid, will be added to the Bid price.

Or

ii) The Procuring Agency will draw up a list of high-usage and high-value items of components and spare parts, along with estimated quantities of usage in the initial period of operation specified in the **BDS.** The total cost of these items and quantities will be computed from spare parts unit prices submitted by the Bidder and added to the Bid price.

Or

iii) The Procuring Agency will estimate the cost of spare parts usage in the initial period of operation specified in the **BDS**, based on information furnished by each Bidder, as well as on past experience of the Procuring Agency or other Procuring Agency's in similar situations. Such costs shall be added to the Bid price for evaluation.

(e) Spare parts and after sales service facilities in Pakistan

The cost to the Procuring Agency of establishing the minimum service facilities and parts inventories, as outlined in the **BDS** or elsewhere in the Bidding Documents, if quoted separately, shall be added to the Bid price.

(f) Operating and maintenance costs

Since the operating and maintenance costs of the goods under procurement form a major part of the life cycle cost of the

		equipment, these costs will be evaluated in accordance with the criteria specified in the **BDS** or in the Technical Specifications. (g) *Performance and productivity of the equipment.* (i) Bidders shall state the guaranteed performance or efficiency in response to the Technical Specification. For each drop in the performance or efficiency below the norm of 100, an adjustment for an amount specified in the **BDS** will be added to the Bid Price, representing the capitalized cost of additional operating costs over the life of the plant, using the methodology specified in the **BDS** or in the Technical Specifications. Or (ii) Goods offered shall have a minimum productivity specified under the relevant provision in the Technical Specifications to be considered responsive. Evaluation shall be based on the cost per unit of the actual productivity of goods offered in the Bid, and adjustment will be added to the Bid price using the methodology specified in the **BDS** or in the Technical Specifications. (h) *Specific additional criteria.* Other specific additional criteria to be considered in the evaluation and the evaluation method shall be detailed in the **BDS** and/or the Technical Specifications.
	33.6	If these Bidding Documents allow Bidders to quote separate prices for different Lots, and the award to a single Bidder of multiple Lots, the methodology of evaluation to determine the lowest evaluated Lot combinations, including any discounts offered in the Form of Bid, is specified in the **BDS.**
34. ***Domestic Preference***	34.1	If the **BDS** so specifies, the Procuring Agency will grant a margin of preference to certain goods in line with the rules, regulations, regulatory guides or instructions issued by the Authority from time to time.
35. ***Determination of Most Advantageous Bid***	35.1	In case where the Procuring Agency adopts the Cost Based Evaluation Technique and, the Bid with the lowest evaluated price from amongst those which are eligible, compliant and substantially responsive shall be the Most Advantageous Bid.

	35.2	The Procuring Agency may adopt the Quality & Cost Based Selection Technique due to the following two reasons: i. Where the Procuring Agency knows about the main features, usage and output of the products; however not clear about the complete features, technical specifications and functionalities of the goods to be procured and requires the bidders to submit their proposals defining those features, specifications and functionalities; or ii. Where the Procuring Agency, in addition to the mandatory requirements and mandatory technical specifications, requires parameters **specified in Evaluation Criteria** to be evaluated while determining the quality of the goods: In such cases, the Procuring Agency may allocate certain weightage to these factors as a part of Evaluation Criteria, and may determine the ranking of the bidders on the basis of combined evaluation in accordance with provisions of Rule 2(1)(h) of PPR-2004.
36. ***Abnormally Low Financial Proposal***	36.1	Where the Bid price is considered to be abnormally low, the Procuring Agency shall perform price analysis either during determination of Most Advantageous Bid or as a part of the post-qualification process. The following process shall apply: (a) The Procuring Agency may reject a Bid if the Procuring Agency has determined that the price in combination with other constituent elements of the Bid is abnormally low in relation to the subject matter of the procurement (i.e. scope of the procurement or ancillary services) and raises concerns as to the capability and capacity of the respective Bidder to perform that contract; (b) Before rejecting an abnormally low Bid the Procuring Agency shall request the Bidder an explanation of the Bid or of those parts which it considers contribute to the Bid being abnormally low; take account of the evidence provided in response to a request in writing; and subsequently verify the Bid or parts of the Bid being abnormally low; (c) The decision of the Procuring Agency to reject a Bid and reasons for the decision shall be recorded in the procurement proceedings and promptly communicated to the Bidder concerned; (d) The Procuring Agency shall not incur any liability solely by rejecting abnormally Bid; and (e) An abnormally low Bid means, in the light of the Procuring Agency's estimate and of all the Bids submitted, the Bid appears to

		be abnormally low by not providing a margin for normal levels of profit. Guidance for Procuring Agency: In order to identify the Abnormally Low Bid (ALB) following approaches can be considered to minimize the scope of subjectivity: (i) Comparing the bid price with the cost estimate; (ii) Comparing the bid price with the bids offered by other bidders submitting substantially responsive bids; and (iii) Comparing the bid price with prices paid in similar contracts in the recent past either government- or development partner-funded.
	36.2	The Procuring Agency will determine to its satisfaction whether the Bidder that is selected as having submitted the most advantageous Bid is qualified to perform the contract satisfactorily, in accordance with the criteria listed in ITB 13.3.
	36.3	The determination will take into account the Bidder's financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 13.3, as well as such other information as the Procuring Agency deems necessary and appropriate. Factors not included in these Bidding Documents shall not be used in the evaluation of the Bidders' qualifications.
	36.4	Procuring Agency may seek "Certificate for Independent Price Determination" from the Bidder and the results of reference checks may be used in determining award of contract. Explanation: The Certificate shall be furnished by the bidder. The bidder shall certify that the price is determined keeping in view of all the essential aspects such as raw material, its processing, value addition, optimization of resources due to economy of scale, transportation, insurance and margin of profit etc.
	36.5	An affirmative determination will be a prerequisite for award of the contract to the Bidder. A negative determination will result in rejection of the Bidder's Bid, in which event the Procuring Agency will proceed to the next ranked bidder to make a similar determination of that Bidder's capabilities to perform satisfactorily.

F. AWARD OF CONTRACT

37. ***Criteria of Award***	37.1	Subject to **ITB 36 and 38**, the Procuring Agency will award the Contract to the Bidder whose Bid has been determined to be substantially responsive to the Bidding Documents and who has been declared as Most Advantageous Bidder, provided that such Bidder has been determined to be: a) eligible in accordance with the provisions of ITB 3; b) is determined to be qualified to perform the Contract satisfactorily; and c) Successful negotiations have been concluded, if any.
38. ***Negotiations***	38.1	Negotiations may be undertaken with the Most Advantageous Bid relating to the following areas: (a) a minor alteration to the technical details of the statement of requirements; (b) reduction of quantities for budgetary reasons, where the reduction is in excess of any provided for in the Biding documents; (c) a minor amendment to the special conditions of Contract; (d) finalizing payment arrangements; (e) delivery arrangements; (f) the methodology for provision of related services; or (g) clarifying details that were not apparent or could not be finalized at the time of Bidding;
	38.2	Where negotiation fails to result into an agreement, the Procuring Agency may invite the next ranked Bidder for negotiations. Where negotiations are commenced with the next ranked Bidder, the Procuring Agency shall not reopen earlier negotiations.
39. ***Procuring Agency's Right to to reject All Bids***	39.1	Notwithstanding **ITB 37**, the Procuring Agency reserves the right to reject all the bids, and to annul the Bidding process at any time prior to award of contract, without thereby incurring any liability to the affected Bidder or Bidders. However, the Authority (i.e. PPRA) may call from the Procuring Agency the justification of those grounds.
	39.2	Notice of the rejection of all Bids shall be given promptly to all Bidders that have submitted Bids.
	39.3	The Procuring Agency shall upon request communicate to any Bidder the grounds for its rejection of its Bids, but is not required to justify those grounds.
40. ***Procuring Agency's Right to Vary Quantities at the Time of Award***	40.1	The Procuring Agency reserves the right at the time of contract award to increase or decrease the quantity of goods or related services originally specified in these Bidding Documents (schedule of requirements) provided this does not exceed by the percentage indicated in the BDS, without any change in unit price or other terms and conditions of the Bid and Bidding Documents.

41. ***Notification of Award***	41.1	Prior to the award of contract, the Procuring Agency shall issue a Final Evaluation Report giving justification for acceptance or rejection of the bids.
	41.2	Where no complaints have been lodged, the Bidder whose Bid has been accepted will be notified of the award by the Procuring Agency prior to expiration of the Bid Validity period in writing or electronic forms that provide record of the content of communication. The Letter of Acceptance will state the sum that the Procuring Agency will pay the successful Bidder in consideration for the execution of the scope of works as prescribed by the Contract (hereinafter and in the Contract called the "Contract Price).
	41.3	The notification of award will constitute the formation of the Contract, subject to the Bidder furnishing the Performance guarantee in accordance with **ITB 43** and signing of the contract in accordance with **ITB 42.2.**
	41.4	Upon the successful Bidder's furnishing of the performance security guarantee pursuant to **ITB 43**, the Procuring Agency will promptly notify each unsuccessful Bidder, the name of the successful Bidder and the Contract amount and will discharge the Bid Security or Bid Securing Declaration of the Bidders pursuant to **ITB 18.7.**
42. ***Signing of Contract***	42.1	Promptly after notification of award, Procuring Agency shall send the successful Bidder the draft agreement, incorporating all terms and conditions as agreed by the parties to the contract.
	42.2	Immediately after the Redressal of grievance by the GRC, and **after fulfillment of all conditions precedent** of the Contract Form, the successful Bidder and the Procuring Agency shall sign the contract.
	42.3	Where no formal signing of a contract is required, purchase order issued to the bidder shall be construed to be the contract.
43. ***Performance Security (or Guarantee)***	43.1	After the receipt of the Letter of Acceptance, the successful Bidder, within the specified time, shall deliver to the Procuring Agency a Performance Guarantee in the amount and in the form stipulated in the **BDS and SCC**, denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the Conditions of Contract.
	43.2	If the Performance Security Guarantee is provided by the successful Bidder and it shall be in the form specified in the **BDS** which shall be in any of the following: (a) certified cheque, cashier's or manager's cheque, or bank draft; (b) irrevocable letter of credit issued by a Scheduled bank or in the case of an irrevocable letter of credit issued by a foreign bank, the letter shall be confirmed or authenticated by a Scheduled bank; (c) bank guarantee confirmed by a reputable local bank or, in the case of a successful foreign Bidder, bonded by a foreign bank; or

		(d) surety bond callable upon demand issued by any reputable surety or insurance company. Any Performance Security (or guarantee) submitted shall be enforceable in Pakistan.
	43.3	Failure of the successful Bidder to comply with the requirement of **ITB 43.1** shall constitute sufficient grounds for the annulment of the award and forfeiture of the Bid Security, in which event the Procuring Agency may make the award to the next ranked Bidder or call for new Bids.
44. *Advance Payment*	44.1	The advance payment will not be provided in normal circumstances. However, in case where international incoterms are involved, the same will be dealt with standard international practices and in the manner as prescribed in **ITB 44.2.**
	44.2	The Procuring Agency will provide an Advance Payment as stipulated in the Conditions of Contract, subject to a maximum amount, as stated in the **BDS**. The Advance Payment request shall be accompanied by an Advance Payment Guarantee in the form provided in Section IX. For the purpose of receiving the Advance Payment, the Bidder shall make and estimate of, and include in its Bid, the expenses that will be incurred in order to commence Delivery of Goods. These expenses will relate to the purchase of equipment, machinery, materials, and on the engagement of labor during the first month beginning with the date of the Procuring Agency's "Notice to Commence" as specified in the **SCC**.
45. *Arbitrator*	45.1	The Arbitrator shall be appointed by mutual consent of the both parties as per the provisions specified in the SCC.
46. *Corrupt & Fraudulent Practices*	46.1	Procuring Agencies (including beneficiaries of Government funded projects and procurement) as well as Bidders/Suppliers/Contractors under Government financed contracts, observe the highest standard of ethics during the procurement and execution of such contracts, and will avoid to engage in any corrupt and fraudulent practices.

G. GRIEVANCE REDRESSAL & COMPLAINT REVIEW MECHANISM

47. ***Constitution of Grievance Redressal***	47.1	Procuring agency shall constitute a Grievance Redressal Committee (GRC) comprising of odd number of persons with proper power and authorization to address the complaint. The GRC shall not have any of the members of Procurement Evaluation Committee. The committee must have one subject specialist depending the nature of the procurement.
48. ***GRC Procedure***	48.1	Any party can file its written complaint against the eligibility parameters or any other terms and conditions prescribed in the prequalification or bidding documents found contrary to provision of Procurement Regulatory Framework, and the same shall be addressed by the GRC well before the bid submission deadline.
	48.2	Any Bidder feeling aggrieved by any act of the procuring agency after the submission of his bid may lodge a written complaint concerning his grievances not later than seven days of the announcement of technical evaluation report and five days after issuance of final evaluation report.
	48.3	In case, the complaint is filed against the technical evaluation report, the GRC shall suspend the procurement proceedings.
	48.4	In case, the complaint is filed after the issuance of the final evaluation report, the complainant cannot raise any objection on technical evaluation of the report: Provided that the complainant may raise the objection on any part of the final evaluation report in case where single stage one envelop bidding procedure is adopted.
	48.5	The GRC, in both the cases shall investigate and decide upon the complaint within ten days of its receipt.
	48.6	Any bidder or the procuring agency not satisfied with the decision of the GRC may file Appeal before the Appellate Committee of the Authority on prescribed format after depositing the Prescribed fee.
	48.7	The Committee, upon receipt of the Appeal against the decision of the GRC complete in all respect shall serve notices in writing upon all the parties to appeal.

	48.8	The committee shall call the record from the concerned procuring agency or the GRC as the case may be, and the same shall be provided within prescribed time.
	48.9	The committee may after examination of the relevant record and hearing all the concerned parties, shall decide the complaint within fifteen (15) days of receipt of the Appeal.
	48.10	The decision of the Committee shall be in writing and shall be signed by the Head and each Member of the Committee. The decision of the committee shall be final.

H. MECHANISM OF BLACKLISTING

49. ***Mechanism of Blacklisting***	49.1	The Procuring Agency shall bar for not more than the time prescribed in Rule-19 of the Public Procurement Rules, 2004, from participating in their respective procurement proceedings, bidder or contractor who either: i. Involved in corrupt and fraudulent practices as defined in Rule-2 of Public Procurement Rules; ii. Fails to perform his contractual obligations; and iii. Fails to abide by the id securing declaration;
	49.2	The show cause notice shall contain: (a) precise allegation, against the bidder or contractor; (b) the maximum period for which the Procuring Agency proposes to debar the bidder or contractor from participating in any public procurement of the Procuring Agency; and (c) the statement, if needed, about the intention of the Procuring Agency to make a request to the Authority for debarring the bidder or contractor from participating in public procurements of all the procuring agencies.
	49.3	The procuring agency shall give minimum of seven days to the bidder or contractor for submission of written reply of the show cause notice
	49.4	In case, the bidder or contractor fails to submit written reply within the requisite time, the Procuring Agency may issue notice for personal hearing to the bidder or contractor/ authorize representative of the bidder or contractor and the procuring agency shall decide the matter on the basis of available record and personal hearing, if availed.
	49.5	In case the bidder or contractor submits written reply of the show cause notice, the Procuring Agency may decide to file the matter or direct issuance of a notice to the bidder or contractor for personal hearing.
	49.6	The Procuring Agency shall give minimum of seven days to the bidder or contractor for appearance before the specified officer of the Procuring Agency for personal hearing. The specified officer shall decide the matter on the basis of the available record and personal hearing of the bidder or contractor, if availed
	49.7	The procuring Agency shall decide the matter within fifteen days from the date of personal hearing unless the personal hearing is adjourned to a next date and in such an eventuality, the period of personal hearing shall be reckoned from the last date of personal hearing.
	49.8	The Procuring Agency shall communicate to the bidder or contractor the order of debarring the bidder or contractor from participating in any public procurement with a statement that the bidder or contractor may, within thirty days, prefer a representation against the order before the Authority.

	49.9	Such blacklisting or barring action shall be communicated by the procuring agency to the Authority and respective bidder or bidders in the form of decision containing the grounds for such action. The same shall be publicized by the Authority after examining the record whether the procedure defined in blacklisting and debarment mechanism has been adhered to by the procuring agency.
	49.10	The bidder may file the review petition before the Review Petition Committee Authority within thirty days of communication of such blacklisting or barring action after depositing the prescribed fee and in accordance with "Procedure of filing and disposal of review petition under Rule-19(3) Regulations, 2021". The Committee shall evaluate the case and decide within ninety days of filing of review petition
	49.11	The committee shall serve a notice in writing upon all respondent of the review petition. The notices shall be accompanied by the copies of review petition and all attached documents of the review petition including the decision of the procuring agency. The parties may file written statements along with essential documents in support of their contentions. The Committee may pass such order on the representation may deem fit.
	49.12	The Authority on the basis of decision made by the committee either may debar a bidder or contractor from participating in any public procurement process of all or some of the procuring agencies for such period as the deemed appropriate or acquit the bidder from the allegations. The decision of the Authority shall be final.

SECTION III: BID DATA SHEET

Bid Data Sheet (BDS)

The following specific data for the Information System to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITBs). Whenever there is a conflict, the provisions herein shall prevail over those in ITBs.

BDS Clause Number	ITB Number	Amendments of, and Supplements to, Clauses in the Instruction to Bidders
		A. Introduction
1.	**1.1**	Name of Procuring Agency: **SBP Banking Services Corporation.** The Description (as specified in ITB) of the System is: ***Supply, Development, Implementation, Integration and Technical Support of Currency Management System***
2.	**2.1**	Financial year for the operations of the Procuring Agency: ***2024-25*** **Name of Project:** *Supply, Development, Implementation, Integration and Technical Support of Currency Management System* **Name and identification number of the Contract:** *GSD (PROC-I)/186615/Supply/CMS/2024*
3.	**3.1**	Joint Venture is **NOT Applicable**
4.	**3.5**	The invitation to Bids is open to all prospective supplier, manufacturers or authorized partners subject to any provisions of incorporation or licensing by the respective national incorporating agency or statutory body established for that particular trade or business. The PSF (i.e. Principal Software Firm) for the purpose of this bid shall be **Manufacturer/Developer of Software Solution**.
5.	**4.6**	Demonstration of authorization by manufacturer: Principal Software Firm / Manufacturer's Authorization Form is *not required.*
		B. Bidding Documents
6.	**7.2**	The number of documents to be completed and returned is one original and one copy bid. **Technical and financial proposals must be in separate sealed envelopes.**
7.	**8.1**	The address for clarification of Bidding Documents is **Senior Joint Director** Procurement Division I (IT), General Services Department, SBP Banking Services Corporation (SBP BSC) 4th Floor BSC House, I.I Chundrigar Road, Karachi, Phone: (92-21)–32455948 & 32455482

		Email: gsd.proc@sbp.org.pk
	8.5	Pre-bid meeting is NOT required.

C. Preparation of Bids

8.	**10.1**	The Language of all correspondences and documents related to the Bid is **English.**
9.	**11.1 (h)**	In addition to the documents stated in **ITB 11,** the following documents must be included with the Bid a) Affidavit for Bidder's Blacklisting Status b) Declaration for Beneficial Ownership
10.	**12.3 (c)**	Other procurement specific documentation requirements are **Not Required**
11.	**12.4**	**Not Required**
12.	**13.3 (b)**	The qualification criteria required from Bidders in **ITB 13.3(b)** is modified as follows: *a) Bidder must be a Principal Software Firm (PSF) or an Authorized Partner of the PSF;* *b) Bidder must have experience of at least 03 (three) implementations of Designing, Developing & Implementing Enterprise Level Software Solutions of comparable scale during last 10 (ten) years;* *c) Bidder must have strength of at least 02 (two) Certified Project Management Professionals, 02 (two) Business Analysts and 10 (ten) Technical / Functional Resources with minimum experience of 05 (five) years of the quoted software development framework;* *d) Bidder must have a verifiable service/support office in Karachi;* *e) Bidder must have Annual Sales Volume/Gross Turnover of at least PKR 500 Million in any of last 03 (three) years;* *f) Bidder must be registered with Income Tax and Sales Tax Departments and must appear on Active Taxpayer List of FBR Pakistan;* *g) Bidder must not have been blacklisted or be in breach of performance with SBP or any Organization(s).*
13.	**15.6 (a) (i)**	For goods making information Systems manufactured from within Pakistan the price quoted shall be inclusive of: a) all applicable taxes including all custom duties, sales & other taxes etc. which will be payable on the goods if the contract is awarded. b) the price for inland transportation, insurance, and other local costs of any incidental services to delivery of the goods to their final destination i.e. Procuring Agency's Site(s).

14.	**15.6 (b)**	For goods offered from abroad the price quoted shall be: Quoted on a Delivered Duty Paid (DDP) basis, inclusive of all taxes, stamps, duties, levies, fees, inland transportation, insurance, incidental services, installation and integration charges imposed till the delivery location specified in the Schedule of Requirements. No separate payment shall be made for the incidental services to delivery of the goods from the port of entry to their final destination i.e. Procuring Agency's Site(s).
15.	**15.8**	Prices quoted by the Bidder shall be "**fixed**"; However, any subsequent legislation enacted and enforced between bid opening and finalization of award that impacts the bid price would be duly accounted for.
16.	**16.1 (a)**	a) For Information System originating in Pakistan the currency of the Bid shall be ***Pakistani Rupees (PKR)*;** b) For Information System originating from outside Pakistan, the Bidder shall express its Bid in ***Pakistani Rupees (PKR)***.
17.	**16.2**	Comparison of bids quoted in different currencies is ***Not Applicable***
18.	**17.1**	The Bid Validity period shall be **140** days.
19.	**18.1**	The amount of Bid Security shall be **PKR 5,000,000/- (Rupees Five Million only).** The currency of the Bid Security shall be ***Pakistani Rupees.*** Bid Security must be valid till: **11-Aug-25** ***Bid Security must be part of the <u>Technical Proposal Envelope</u>.***
20.	**18.3**	The Bid Security shall be in favor of 'SBP Banking Services Corporation' in the form of: either Payment Order/Bank Draft or an unconditional Bank Guarantee enforceable in Pakistan
21.	**18.3 (c)**	Any other form of Bid Security is **Not Applicable**.
22.	**19.1**	Alternative Bids to the requirements of the Bidding Documents will not be permitted.
23.	**21.1**	The number of copies of the Bid to be completed and returned shall be **One.**
24.	**21.2**	Duly notarized Power of Attorney authorizing the signatory of the Bidder to submit the Bid.

D. Submission of Bids

25.	**22.2 (a)**	Bid shall be submitted at the office of: Procurement Division I (IT), General Services Department, SBP Banking Services Corporation (SBP BSC), 4th Floor BSC House,

		I.I Chundrigar Road, Karachi Phone: (92-21)–32455948 & 32455482
26.	**22.2 (b)**	Title of the subject Procurement or Project name: *Supply, Development, Implementation, Integration and Technical Support of Currency Management System* ITB title and No: *GSD (PROC-I)/186615/Supply/CMS/2024* **Monday, 24 February 2025 11:00 AM**
27.	**23.1**	The deadline for Bid submission is: **Monday, 24 February 2025 11:00 AM**

E. Opening and Evaluation of Bids

28.	**26.1**	The Bid opening shall take place at: **Meeting Room**, General Services Department 4th Floor BSC House, SBP Banking Services Corporation (HOK), I.I Chundrigar Road, Karachi –Pakistan. **Monday, 24 February 2025 11:30 AM** In case of any unforeseen reasons, unrest or force majeure, which may cause delay on the bid opening date, the bids shall be opened on the next working day at the same place and time. The opening date of Financial Proposal will be communicated to the eligible bidders by the Procuring Agency.
29.	**27**	27.1 Information relating to evaluation of bids and recommendations concerning to award of the contract shall not be disclosed by the Procuring Agency to the bidders or to any other person who is not officially concerned with the process, until the announcement of the result of evaluation. 27.2 The Bidder shall not disclose or attempt to make public any information relating to the bidding documents, bidding process and award of the contract to any person or entity without the Procuring Agency's prior written consent. 27.3 In case of any disclosure related to the bidding process and contractual obligations at any stage by any bidder and/or contractor, the Procuring Agency may reject its bid and/or terminate the contract.
30.	**32.2**	The currency that shall be used for Bid evaluation and comparison purposes to convert all Bid prices expressed in various currencies. (Not Applicable)

		The source of exchange rate shall be: the selling rate, prevailing on the date of opening of (financial part of) bids, as notified by the State Bank of Pakistan on that day. (Not applicable) The date of exchange rate shall be: Date of Financial Bid Opening (Not applicable)
31.	**33.2**	Evaluation of the bids and award of contract will be done for the complete requirement. The bidders' minimum Eligibility/Qualification will be ascertained totally on compliance based method as per Bidders Eligibility/Qualification Criteria (Table-Y of Section VI). The technical proposals of the only qualified bidders (after minimum eligibility/qualification) shall be evaluated in detail. The Technical Compliance (Table-X of Section V) will be evaluated totally on compliance based method. The Financial Proposals of the only technically qualified proposals will be opened. The Financial Bids will be evaluated on the basis of unit price and applicable taxes.
32.	**33.4 (h)**	Other specific criteria are **Nil**.
33.	**33.5 (a)**	Inland transportation from port of entry/border point to **State Bank of Pakistan SBP Banking Services Corporation, I.I Chundrigar Road, Karachi**, and insurance and incidentals.
34.	**33.5 (b)**	Delivery schedule: The goods covered under this invitation are required to be delivered (shipped) within an acceptable range of weeks specified in the Schedule of Requirement.
35.	**33.5 (c) (ii)**	Deviation in payment schedule is **Not Applicable.**
36.	**33.5 (d)**	Cost of spare parts is **Not Applicable**.
37.	**33.5(e)**	Spare parts and after sales service facilities in Pakistan is **Not Applicable**.
38.	**33.5 (f)**	Operating and maintenance costs. As specified in the Technical Specifications / SLA in the Bidding Documents.
39.	**33.5 (g)**	Performance and productivity of Information System. Goods offered shall have a minimum productivity specified under the relevant provision to be considered responsive as specified in the Technical Specifications.

40.	**33.5 (h)**	Specific additional criteria to be used in the evaluation and their evaluation method or reference to the Technical Specifications is **Not Applicable**.
41.	**33.6**	In case of award to a single Bidder of multiple lots; the methodology of evaluation to determine the lowest evaluated Lot combinations, including any discounts offered in the Form of Bid is **Not Applicable**
42.	**34.1**	Domestic preference **Not Applicable.**
43.	**35**	**Evaluation Techniques** **Least Cost Based Selection (LCBS)** After meeting the requirements of eligibility, qualification and substantial responsiveness, the bid in compliance with all the mandatory (technical) specifications/requirements and/or requisite quality threshold (if any), and having lowest evaluated cost (or financial proposal) shall be considered highest ranked bid.

F. Award of Contract

44.	**40.1**	Percentage for quantity increase or decrease is **15%**.
45.	**43.1**	***10% (Ten Percent)*** Performance Guarantee is required of the total contract amount for the entire contract period.
46.	**43.2**	The Performance Guarantee shall be in the form of an unconditional bank Guarantee enforceable in Pakistan as per Performance Guarantee form specified in the Bidding Documents.
47.	**44.1**	**Not Applicable**.
48.	**44.2**	**Not Applicable**.
49.	**45.1**	Arbitrator shall be appointed by mutual consent of the both parties. The place of Arbitration shall be Karachi, Pakistan.

G. Review of Procurement Decisions

50.	**48.1**	The address of the Procuring Agency Chairman (Grievance Redressal Committee) SBP Banking Services Corporation 1st Floor, HRMD, BSC House, I.I. Chundrigar Road, Karachi - Pakistan
	48.6	The Address of PPRA to submit a **copy** of grievance: Grievance Redressal Appellate Committee, Public Procurement Regulatory Authority 1st Floor, G-5/2, Islamabad, Pakistan Tel: +92-51-9202254

Section IV. Eligible Countries

All the bidders are allowed to participate in the subject procurement without regard to nationality, except bidders of some nationality, prohibited in accordance with policy of the Federal Government.

Following countries are ineligible to participate in the procurement process:

1. India
2. Israel

Ministry of Interior, Government of Pakistan has notified List of Business Friendly Countries (BVL). Information can be accessed through following link:

http://www.dgip.gov.pk/Files/Visa%20Categories.aspx#L

SECTION V: SCHEDULE OF REQUIREMENTS, TECHNICAL SPECIFICATION

A. Functional Specification / Requirements

Introduction

State Bank of Pakistan is the Central Bank of the country. SBP has subsidiaries called SBP-BSC (Banking Services Corporation) having at present sixteen branch offices, NIBAF (National Institute of Banking and Finance), DPC (Deposit Protection Corporation) Pakistan and PSPC (Pakistan Security Printing Corporation). Further information about the Bank is available at http://www.sbp.org.pk

The Currency Issue and Management System caters to the complete life cycle management of Pakistan's Currency Notes of different denominations which includes indent, issuance, distribution, disposing of and maintaining a stable supply chain processes all across the country with different stakeholders. The key purpose of Currency Issue and Management System is to ensure uninterrupted provision of good quality Bank Notes and Coins across the country and retrieval of unfit bank notes from circulation and their destruction through systematic and secure processes as per SBP's Policies and procedures. To achieve this objective, a coordination mechanism is in place internally with PSPC, SBP BSC and Finance Department and with external institutions like Pakistan Mint, National Bank of Pakistan (NBP) / Other Entities designated as Chests Branches.

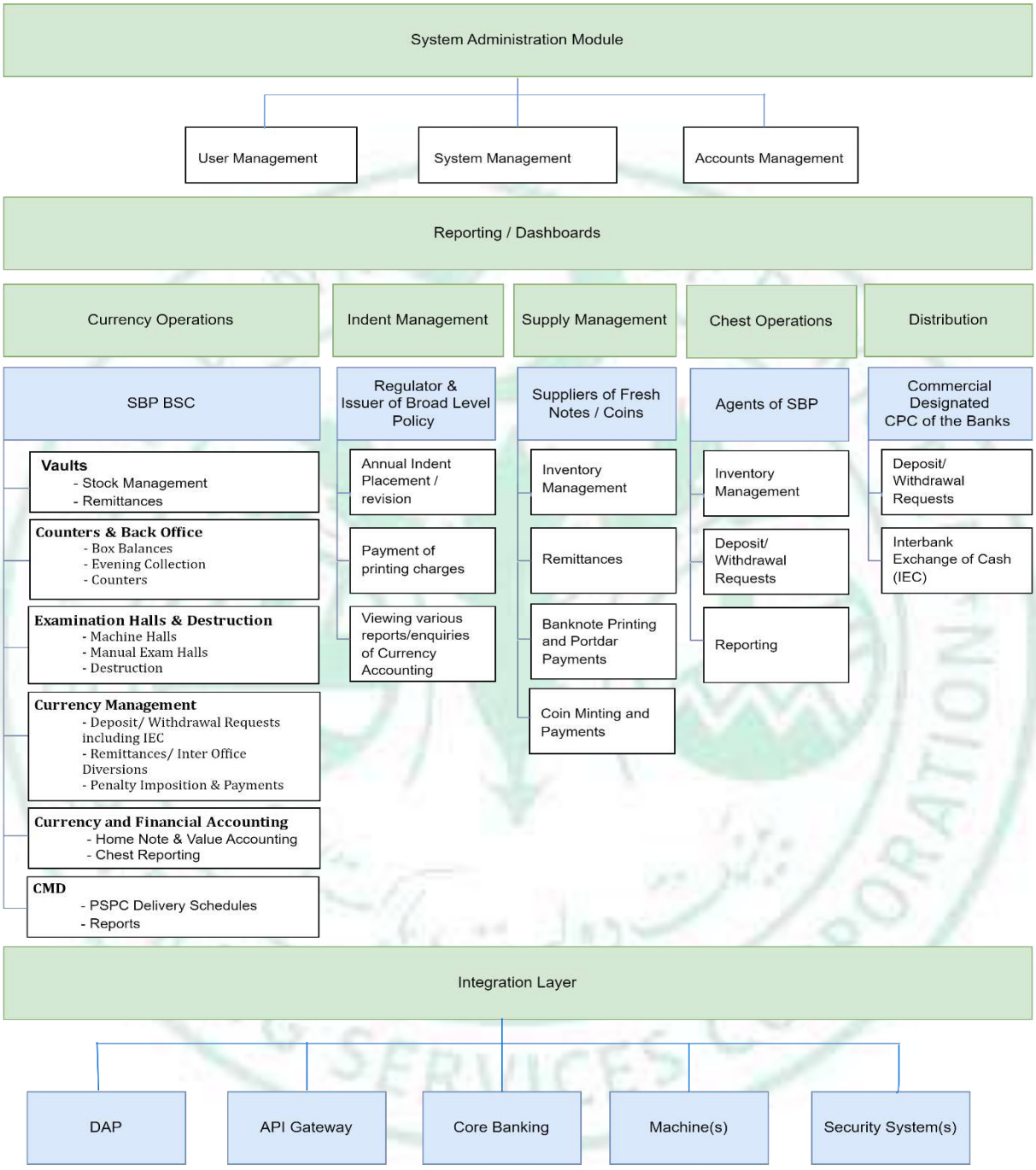
SBP now intends to develop a new fully customized software solution to manage its Currency Issue and Management Operations.

The Currency Management System will provide following key functionalities and capabilities based upon the Functional and Technical Requirements provided herein.

1. Currency Demand Forecasting and Analysis for Indent Preparation for Notes and Coins
2. Currency Indent Manufacturing ordering of various Denominations
3. Currency Delivery Scheduling
4. Currency Stock Management
5. Currency Issuance / Remittances Management across Pakistan:
    - Across SBP – BSC field offices
    - Across Designated Chest Branches of NBP/Commercial Bank branches designated as Chest
    - Across Designated Branches of Commercial Banks
    - From PSPC and Mint
6. Vault and Teller Operations of SBP-BSC field offices
7. Over the Counter Currency Notes and Coins exchange in SBP-BSC field offices
8. Integration with automated Banks Currency Notes / Coins Processing and Examination machines
9. Soiled Notes and Destruction Management in SBP-BSC field offices
10. Currency Issue Accounting Management
11. Reporting and Management Dashboards
12. Monitoring Inter-Bank Exchange of Currency
13. Data Analytics Capability

Business Architecture

The Business architecture of the intended System is as follows:



Stakeholders

The stakeholders involved in the Currency Management System lifecycle are as follows:

S.No	Role	Type	Stakeholder
1.	Regulator & Issuer of Broad Level Policy	Internal	Finance Department, State Bank of Pakistan
2.	Policy Execution and Functional Monitoring Department	Internal	Currency Management Department, SBP BSC
3.	Currency Operations	Internal – Subsidiary	Countrywide SBP BSC field offices
4.	Agent(s) of SBP for handling receipt and issuance of banknotes from/to banks	External- Agent	Countrywide Chest Branches
5.	Commercial Designated Cash Processing Centers of the Banks Branches	External	Designated Branches of Banks
6.	Supplier of fresh Banknotes	Internal-Subsidiary	Pakistan Security Printing Corporation (PSPC)
7.	Supplier of Coins	External	Pakistan Mint

The roles of the various stakeholders differ in each area of currency life cycle and are defined further in the document. Role based authorities and access shall be provided to all stakeholders at each stage.

1. Regulator & Issuer of Broad Level Policy - Finance Department, State Bank of Pakistan:
Finance Department (FD) SBP is the main policy department overseeing currency operations. The FD-SBP shall be preforming/ have access to following functions:

i. Annual Indent / ad-hoc order with Suppliers of Fresh Notes / Coins, including modification and placement of additional indent
ii. Payment of Printing Charges to Suppliers of Fresh Notes / Coins against completed deliveries
iii. Recovery of Misprint notes value from Suppliers of Fresh Notes / Coins
iv. Access to record of inventory available, deliveries completed
v. Statement of Affairs (Balance Sheet)
vi. Home Note Account (Bank Notes Stock position) and Value Account (Coins, Securities, Gold, Bullion etc.) Report(s)

2. Policy Execution and Functional Monitoring Department - Currency Management Department, SBP BSC:
The Currency Management Department (CMD) is the operational department at SBP BSC, which is involved in monitoring & statistical analysis of currency operations and remittances concerning SBP BSC offices, agents of SBP and Designated CPC of Banks. CMD will perform following functions:

i. Monthly Banknote Delivery Schedule with Suppliers of Fresh Notes / Coins for deliveries and modification/changes
ii. Access to record of inventory available, deliveries completed/underway

iii. Statement of Affairs (Balance Sheet)
iv. Home Note and Value Account Reports
v. Reports of all operations based on data from SBP BSC Office, agents of SBP and Designated CPC of Banks transactions, including but not limited to banknotes receipt/withdrawal/processing/destruction, Inter-Office diversions and remittances data
vi. Chest receipts/ deposits (by Designated CPC of Banks)/ withdrawals/ payments/ diversions/ closing & opening balances
vii. Inter-Bank Exchange of Cash data

3. Currency Operations - SBP BSC Field Offices:

The SBP BSC Field Offices are the key stakeholder of the system, involved in performing all cash/currency operations including the following:

i. Remittance Management (Receipt/Dispatch), Vault Management (Receipt/ Storage/ Issuance /Intra-office Movement) to be performed using QR Code generation/reading as per defined functionalities via respective modules
ii. Banknotes processing (Preparation, Examination and destruction)
iii. Banknotes issuance to public/government entities through counters
iv. Banknotes receipt from public
v. Exchange of soiled and defective banknotes
vi. Evening Collection processing of counter balances
vii. Processing of Counterfeit Notes including receipt from commercial banks/public
viii. Processing payments of Suppliers of Fresh Notes / Coins /Agents of SBP Potdars
ix. Managing issuance / deposits to /from Commercial Banks
x. Coin shroffing and exchange
xi. Currency Management and Accounting
xii. Inter-Bank Exchange of Cash
xiii. Report(s) for each function

4. Supplier of Fresh Banknotes - Pakistan Security Printing Corporation, PSPC

The Pakistan Security Printing Corporation (PSPC) is the supplier of fresh banknotes to SBP. For the purpose of system architecture and connectivity, PSPC shall be an Internal Stakeholder. PSPC primarily performs following functions:

i. Receiving Annual Indent from FD-SBP
ii. Receiving Monthly delivery schedule from CMD and subsequent modification
iii. Generation of QR codes for bundles, boxes and pallets
iv. Creation of consignment for dispatch to SBP BSC Field Offices
v. Access to record of inventory available, deliveries completed/underway
vi. Invoice/bill generation for payment of banknote printing
vii. Misprint Notes Management
viii. Counterfeit Notes Management Module
ix. Potdar TA/DA Processing

5. Agent(s) of SBP - National Bank of Pakistan, NBP and/or Other Commercial Bank designated as Chest

Chests are designated branches of National Bank of Pakistan authorized to conduct currency operations on behalf of SBP. Chests perform following functions:

i. Remittance Management (Receipt/Dispatch) including QR code generation/reading for consignments
ii. Vault Position Reporting (Receipt/ Storage / Issuance)

iii. Submission of reports and data to SBP BSC – BCP Scenario
iv. Interbank exchange request of cash
v. Defective Note processing

6. Commercial Designated Cash Processing Centers - Commercial Banks

The Commercial Banks shall perform following functions:

i. Banknotes deposit with SBP BSC Offices/ Chests with QR code generation
ii. Banknotes receipt from SBP BSC offices/Chests with QR code reading
iii. Inter-Bank Exchange request/response of Cash
iv. Counterfeit note deposit to SBP BSC offices
v. Branch wise stock reporting by Head office of respective Commercial Banks

Accounting Structure

Notes Category

The major categories of banknotes in the currency lifecycle are as follows. However, the system shall have the provision for adding new categories, if business need arises.

1. Fresh
2. Reissue
3. Soiled
4. Soiled-Unprocessable
5. Defective
6. Counterfeit
7. Machine Reject
8. BPAS Unfit Packed
9. Misprint

The bank employs a dual accounting system of bookkeeping, maintaining two independent sets of accounting records, each composed of respective journals and ledgers. One set meticulously documents administrative transactions concerning Home Notes i.e. the banknote inventory, which are essentially internal records without intrinsic value. The second set of records meticulously accounts for transactions involving tangible monetary value held by the Bank against the issued notes in circulation.

An imperative connection exists between these two sets of records: the cumulative value registered within the accounts reflecting actual monetary worth (Value Account) must precisely correspond to the total valuation of Home Notes recorded as in circulation. This meticulous synchronization ensures that the documented financial position accurately mirrors the bank's holdings against the issued currency, assuring a comprehensive representation of its monetary assets.

The currency accounting system is structured around specific Home Note and Value Accounts. The Home Note Accounts relates to banknotes, and the Value Accounts relate to assets such as coins, gold, foreign reserves etc. Within these Home Note Accounts, there are additional subcategories that further classify the banknotes based on their position, category, generation and denominations.

For example, a Rs. 10 fresh banknote held at Exchange Vault shall have the following accounting nomenclature in the system:

Home Note Account - Exchange Account – Exchange Vault – Fresh- Generation-Rs. 10

Value Accounts are based on the category of asset i.e. whether gold, coins or reserves etc., only reflecting the value of assets. Home Coin Account shall be maintained to support Value Account in terms of denomination-wise coin accounting, as an additional set of books within Value Account. Whereas, other Value Account transactions will always be in Value without the bifurcation of Denomination.

For instance, nomenclature for coins held in coins' vault of Rs. 5 denominations shall be:

- Value Account - Home Coin Account – Reserve Account – Coin Vault – Commemorative - Generation - Rs. 5
- Value Account - Home Coin Account – Reserve Account – Coin Vault – Regular - Generation - Rs. 5

However, this shall serve only to complement the Value Accounting wherein only value of all the assets shall be maintained. Transactions executed in Home Coin Accounts shall also be reflected in the relevant Value Accounts. Therefore, the Home Coin Account shall be a sub-category of the Value Accounts.

Furthermore, users shall also be able to pass entries directly on Value Accounts in current and back-date based on the parametric configuration.

Moreover, the system must have the capacity that whenever a new account is created, it automatically populates the child accounts based on category or denomination of banknotes available in the system and main account selected by the user i.e. whether Home Note, Home Coin etc. For instance, if a new vault is created by the name "New Vault", system shall automatically create the child accounts based on all the categories available in the system such as:

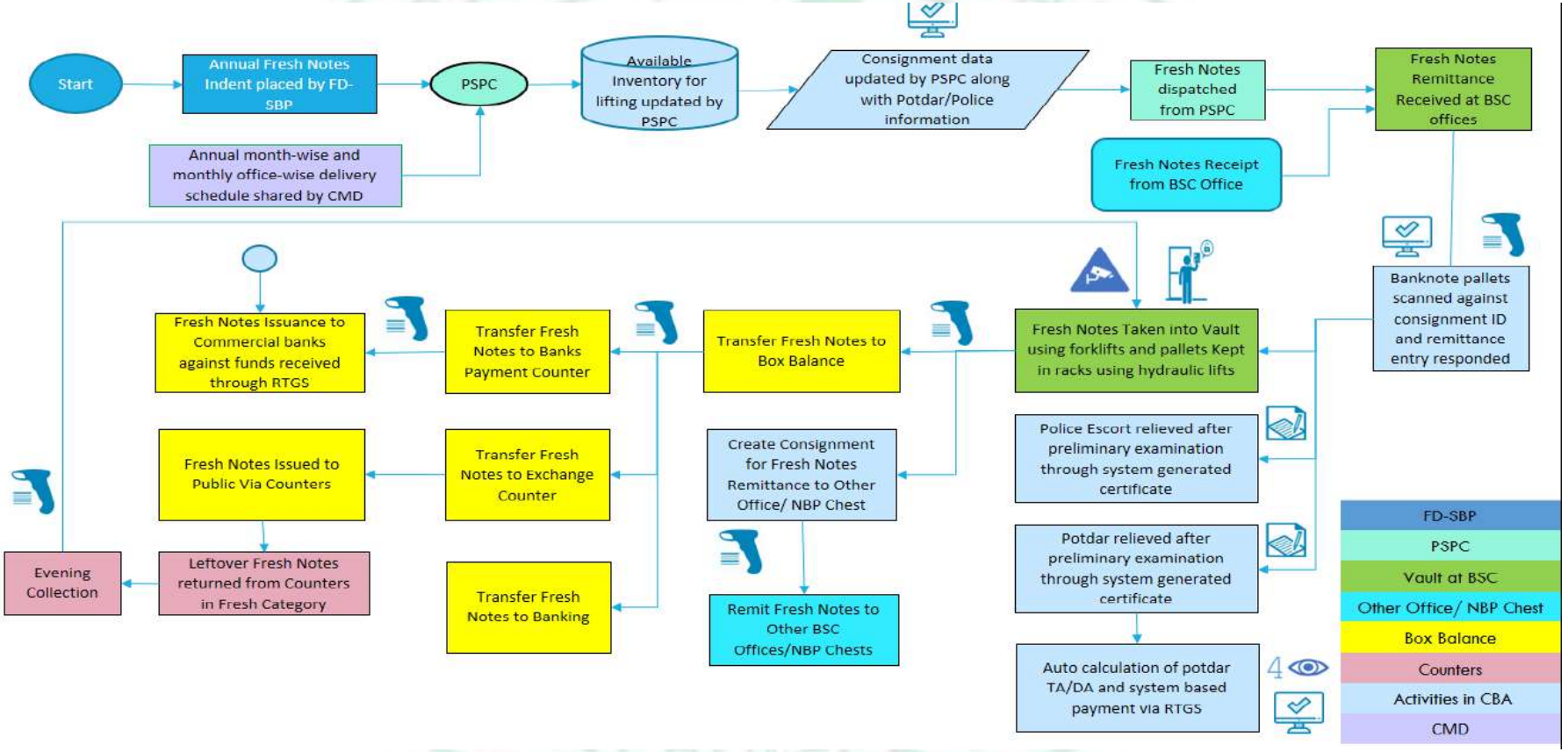
- New Vault – Fresh – All available Denoms
- New Vault – Reissue – All available Denoms
- New Vault – Soiled – All available Denoms
- New Vault – Defective – All available Denoms
- New Vault – Machine Reject – All available Denoms
- New Vault – Fresh-Rs. 2000
- New Vault – Reissue-Rs. 2000
- New Vault – Soiled-Rs. 2000
- New Vault – Defective-Rs. 2000
- New Vault – Machine Reject-Rs. 2000

Similarly, in the event a new category is created, the system shall create corresponding child account for all available accounts.

Processes Flows

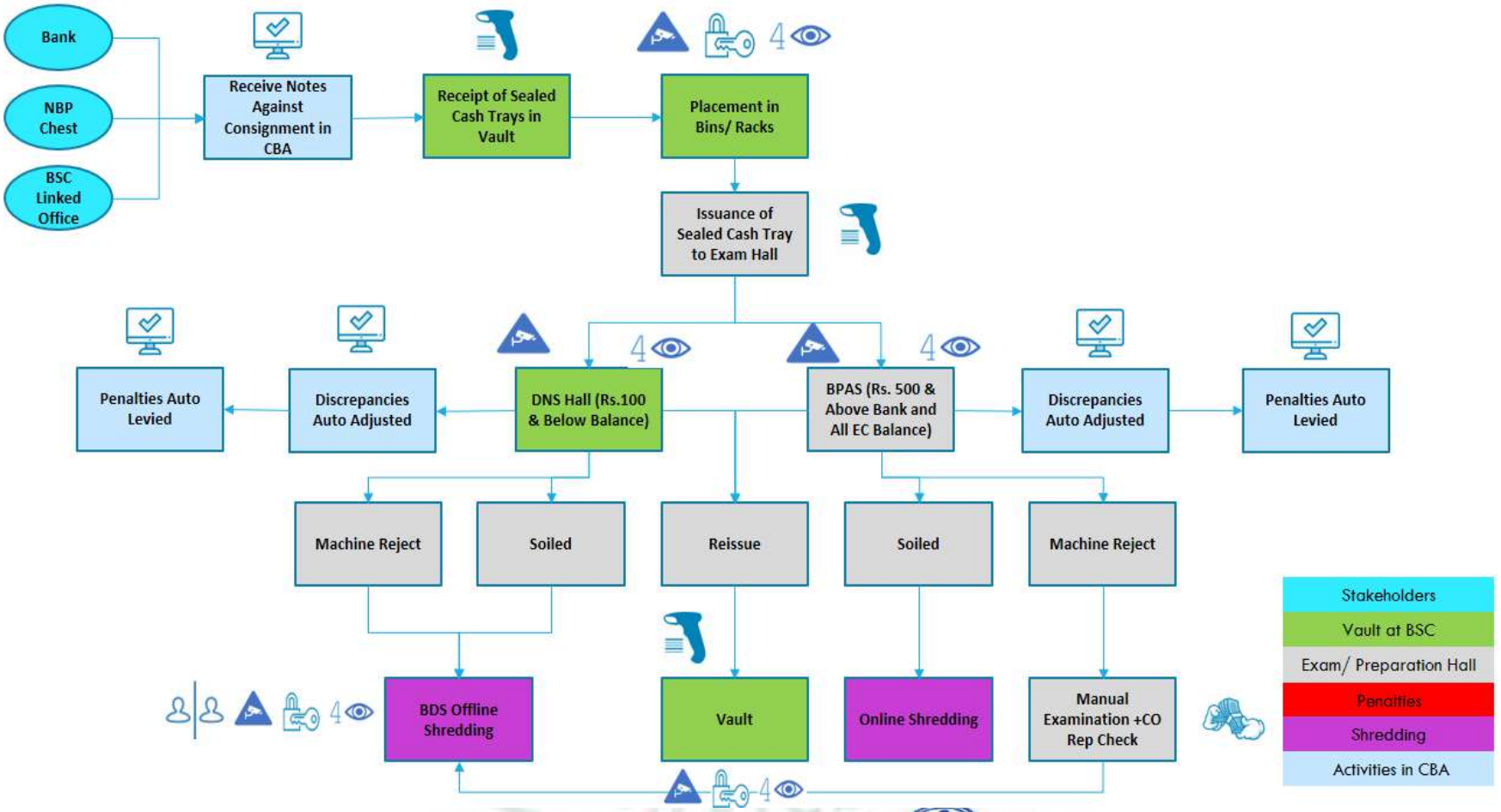
Following are the Major Process Flows of the overall Currency Management System, there are associated sub-processes, which will be discussed later in this document.

Process-I → Fresh Notes Process

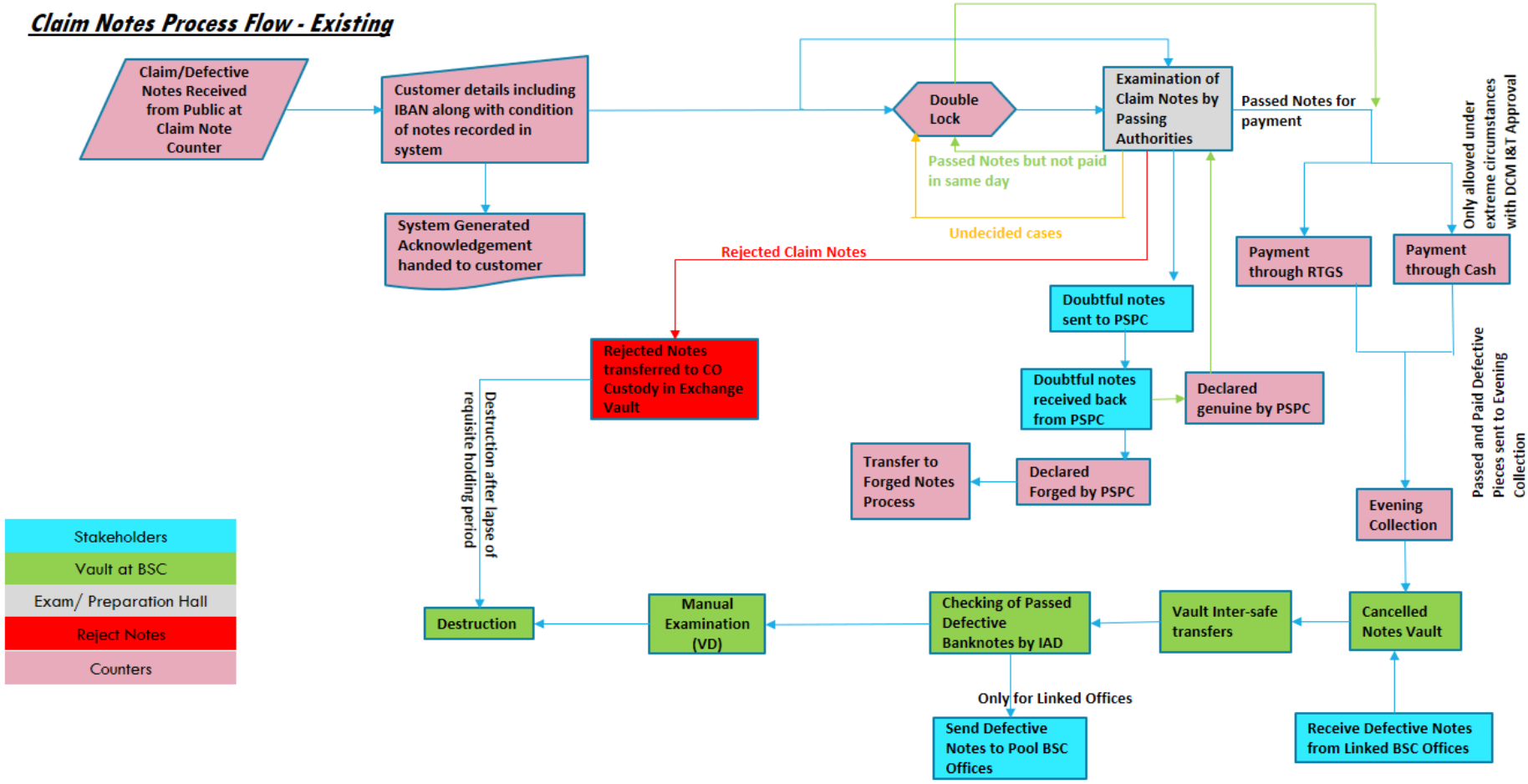


Process-II→ Reissue & Soiled Notes Process

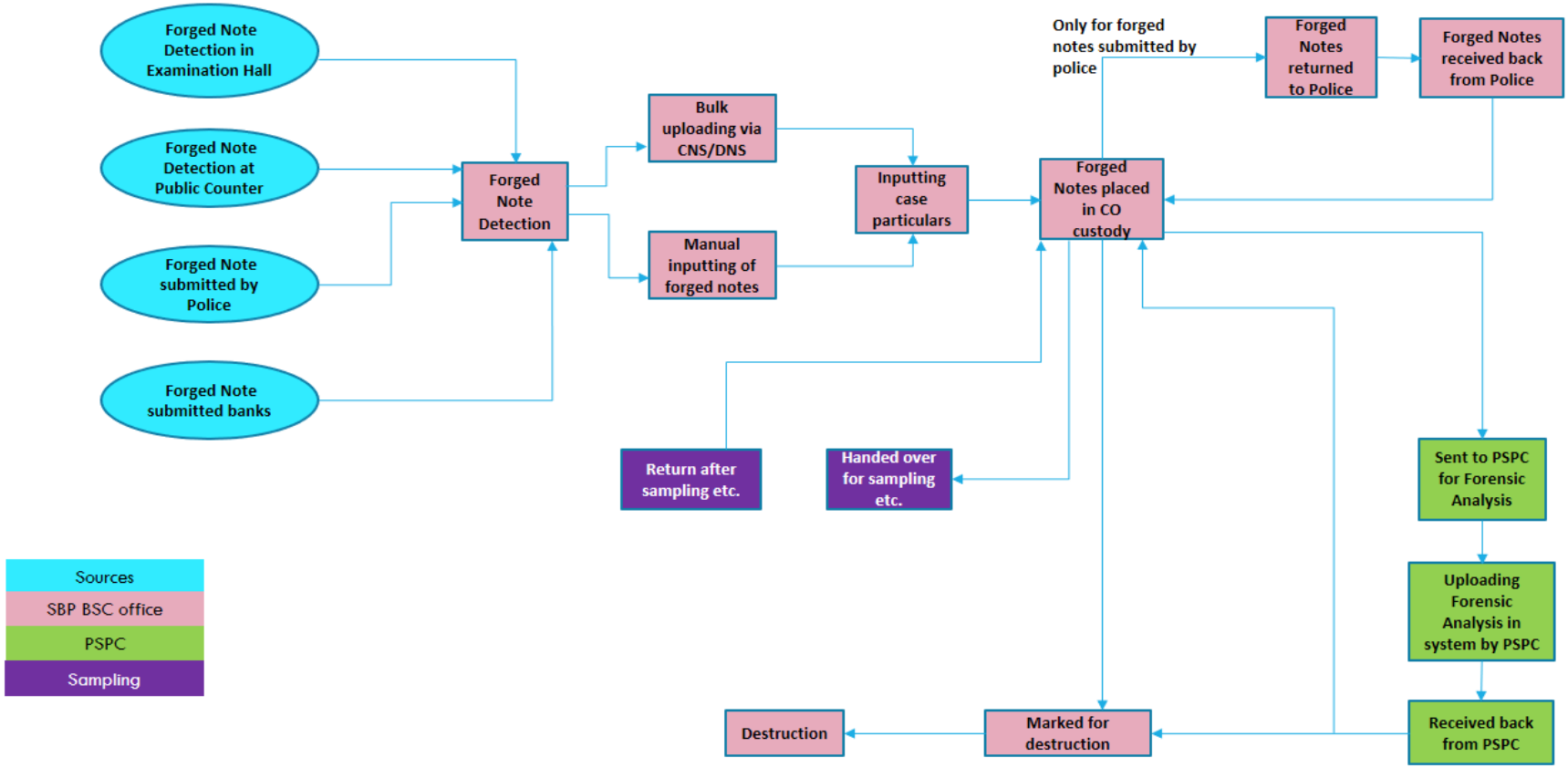
Process of Re-Issuance of Notes and Soiled Notes from different stakeholders.



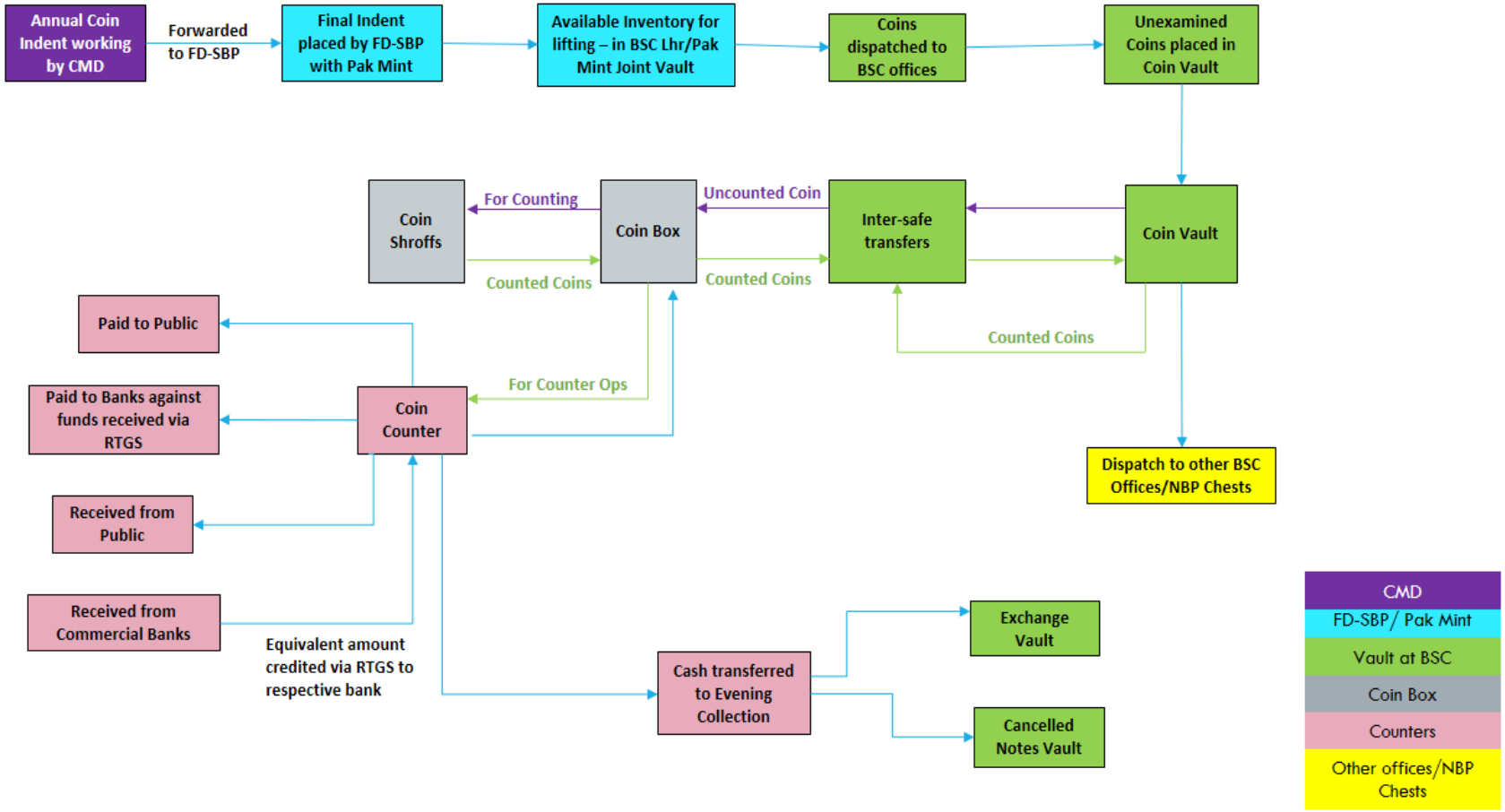
Process- III → Defective Notes Process Flow



Process- IV→ Counterfeit Process Flow



Process –V→ Coins Process Flow



Functions / Sub-Processes of the System

Following are the details of the functions and sub- processes of the Currency Management System. The processes defined in below sections have two types i.e. System Processes and Manual Processes. The Automation of System Processes is required, which includes data input, validation, approvals, posting and recording. Whereas, manual processes are the processes, which are out of the scope of automation but might require data capturing e.g. a process like Transportation of Currency to one place to another is a manual process, and would require the details of the Driver, Truck No or person details to capture in the system.
The system shall have functionality for preserving the transaction date/ time stamps, such that trail of the balance across various stages of the banknote lifecycle is maintained.

The following details are based on the current practice as well as the futuristic assumption of automation with respect to specific business areas. Any specific improvements and design, processes, activities, controls and reporting may be optimized with mutual consultation and agreement.

a. Vaults:

Vaults are used for storage of various categories of banknotes and coins, and for its receipt and issuance to various internal and external stakeholders. The list of vaults is as follows:

I. Fresh Notes Vault
II. Exchange Vault
III. Bonded Vault
IV. Chest Notes Vault
V. Cancelled Notes Vault
VI. Coin Vault

I. Fresh Notes Vault

The purpose of this vault is to receive Fresh Notes as consignments from PSPC and other SBP BSC offices, hold Fresh Notes in Bins/Boxes, transfer Fresh Notes to Exchange Vault and/or dispatch Fresh Notes Remittances as consignments to other SBP BSC offices and Chests.

Process Description:

The Fresh Notes Vault shall perform following functions:

- Receive Fresh Notes Remittances from PSPC, other SBP BSC offices through QR code scanning.
- In case of any discrepancy (Shortage or Excess), carry out detailed examination of received Fresh Notes Remittances.
- Identify shortage/excess/other discrepancies in the examined balance.
- Carry out adjustment of shortage/excess/other discrepancies in the Fresh Notes Remittance at the time of receipt in Fresh Notes Vault
- Create consignment for dispatch of Fresh Notes Remittances to Chests, other BSC offices.
- Receive request from Exchange Vault in system and approve/reject/amend the same.
- Transfer Fresh Notes balances to Exchange Vault.

The processes are further elaborated under respective headings:

i. Remittances Receipt

This menu shall be used for receipt of remittances from PSPC and other SBP BSC offices.

For this purpose, dispatching entity shall initiate originating entry in the system. Upon arrival of remittance at the receiving office, user(s) shall:

Scan QR codes of the Pallets received in the consignment whereupon entire data of the boxes and bundles in the pallets shall be retrieved by the system and captured. The captured details shall include following mandatory fields:

- Denomination
- Number of pieces
- Number of boxes
- Number of pallets
- Date of consignment dispatch
- Name and details of Potdar
- Name and details of Incharge Police Escort
- Box Number (to and from)
- Pallet Number (to and from)
- QR code ID/Reference Number of highest Logistic Unit (i.e. Pallet/Cash Trays etc.)
- Weight of boxes/pallets
- Series (from and to)
- Serial Number (from and to)
- Governor Initials
- Value of the consignment (to be auto calculated by the system)

At this point, system shall match the scanned QR codes against those included in the consignment to carry out automated reconciliation. In case reconciliation is not achieved, system shall allow user(s) to carry out examination of balance in order to determine discrepancies.

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Receive Remittance in the system through a responding entry whereupon the contents of the captured consignment shall be taken into inventory of the receiving office. The user shall be able to perform following functions:

- Receive/Scan Pallets under Examined/Unexamined Category as the case may be. In this regard, user can select which boxes/pallets to receive as Examined and Unexamined.
- Under the scenario where remittance is partially received as examined and unexamined, system shall reconcile the overall value including the post-examination results.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

In the event of no discrepancy, entire remittance shall be received as Examined category.

Debit	Credit
Fresh Notes Stock Account of Receiving office – Examined *In case of no discrepancies*	Currency Account

In the event of discrepancy, the discrepant pallet/box shall be routed through Examination Hall whilst being received as Unexamined.

However, acknowledgement shall be for the entire consignment at once.

Debit	Credit
Fresh Notes Stock Account of Receiving office – Unexamined *In case of discrepancies (in a pallet/box)*	Currency Account

ii. Examination

Upon noticing any physical discrepancy in the balance received, office shall send the balance to Fresh Notes Examination after Capture Consignment Stage.
The balance shall be transferred to Examiner(s) by Vault Incharges. Consequent to completion of examination, the Examiner(s) shall return the balance to Vault Incharges along with details of shortages/excess/any other discrepancies. Moreover, Examiner(s) shall also specify the discrepant box number(s).

The system shall automatically adjust the overall value and quantity of the balance when it is returned to the Fresh Notes Vault. Subsequently, the Receive Remittance transaction shall be used to receive the adjusted remittance in the vault. Moreover, quantity of banknotes in the discrepant box shall also be updated by the system.

Security Level:
These transactions shall have Level 1 Authorization.

Accounting Entries:

Transfer to Examination Hall	
Debit	**Credit**
Suspense Account - Fresh Note Examination	Fresh Notes Stock Account of Receiving office - Unexamined

Transfer Examined Balance to Fresh Notes Vault	
Debit	**Credit**
Fresh Notes Stock Account of Receiving office - Examined	Suspense Account - Fresh Note Examination

Shortage Detection	
Debit	**Credit**
Suspense Account – PSPC Shortage/Excess	Suspense Account - Fresh Note Examination

Adjustment of Shortage	
Debit	**Credit**
Fresh Notes Stock Account of Receiving office - Examined	Suspense Account – PSPC Shortage/Excess

iii. Remittances Dispatch

This menu shall be used for dispatch of remittances to other SBP BSC offices and Chests. For this purpose, the originating entry shall be generated by the dispatching entity in the system. For creation of consignment, following steps shall be carried out:

a. Create consignment in system, and mention the value required to be sent.
b. Scan QR codes of the Pallets present in the Fresh Notes Vault and make part of the consignment. The entire data of the boxes and bundles in the pallets shall be retrieved by the system and captured. Moreover, following fields shall be populated by the system based on data retrieved:
    - Denomination
    - Number of pieces
    - Number of boxes
    - Number of pallets
    - Date of consignment dispatch (system date)
    - Box Number (to and from)
    - Pallet Number (to and from)
    - Weight of box and pallet (to be entered by user)
    - Value of the consignment (to be matched with the initial value inputted by user and auto calculated by the system)

The captured details shall include following optional fields (may be manually inputted by user(s) as well):

- Series (from and to)
- Serial Number (from and to)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

c. Dispatch the consignment created in the system. For this purpose, date of consignment dispatch shall be updated by the system. Further, following fields shall be populated by user(s) manually:
    - Name and PIN/CNIC of Potdar
    - Name and Badge Number of Incharge Police Escort

    Upon committing this transaction, system shall generate originating entry for dispatch of remittance.

    Security Level:
    The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

    Accounting Entry:

Debit	Credit
Currency Account	Fresh Notes Stock Account of Dispatching Office

iv. Cancel Remittance

This transaction shall enable user to cancel a dispatched remittance in the event a dispatched remittance returns without being received at the destination.
For this purpose, user shall input the consignment number and scan the QR Codes of logistic units to verify that there are no missing items.
This shall serve as a reversal of the corresponding transaction of remittance dispatch.

Input Fields:

- Consignment Number
- Number of pieces – Auto-calculated by system
- Number of boxes/logistic units – Auto-calculated by system
- Number of pallets – Auto-calculated by system
- Box/Logistic Unit Number (to and from)
- Pallet Number (to and from)
- To Safe
- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

Accounting Entry:

Debit	Credit
Fresh Notes Stock Account of Dispatching Office	Currency Account

v. Transfer to Exchange Vault

This transaction shall be used for transfer of Fresh Notes to Exchange Vault. For this purpose, the Fresh Notes Vault shall receive requirement from the Exchange Vault in the system.

Exchange Vault shall initiate the process whereupon the Exchange Vault official(s) shall submit their requirement.

Based on the available stock, the Fresh Notes Vault Incharges shall either accept, amend or reject the request.

In case of accept/amend request, users shall scan the boxes/pallets to be transferred through QR code scanners. The system shall retrieve details of the boxes/pallets.

Subsequently, the same shall be transferred to the Exchange Vault by Fresh Notes Vault officials. Upon committing this transaction, system shall generate originating entry.

Auto populated Fields:

- Denomination
- Number of pieces
- Number of boxes
- Number of pallets
- Box Number (to and from)
- Pallet Number (to and from)
- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Exchange Account – Exchange Vault	Fresh Notes Stock Account - Examined

vi. Inter-Safe Transfers

User(s) shall carry out safe-management of the vault through inter-safe transfers. User(s) shall also carry out box-management by keeping record of boxes issued, received, examined, and unexamined. However, the inter-safe transfer shall not affect the aging of the balance in the vault.

Input Fields:

- Denomination
- Number of pieces – Auto-calculated by system

- Number of boxes – Auto-calculated by system
- Number of pallets – Auto-calculated by system
- Box Number (to and from)
- Pallet Number (to and from)
- From Safe
- To Safe
- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

vii. Re-Palletization of Boxes

This transaction shall be used by Vault officials to regroup various boxes from opened pallets in order to form a new pallet. For this purpose, the new entry shall be taken which shall automatically create ID for a pallet. Thereafter, the boxes shall be scanned for inclusion in the pallet. However, this shall only allow inclusion of boxes as determined by the limit set for pallets.

II. Exchange Vault

The purpose of this vault is to serve as intermediary vault between stock side and issuance side. This vault shall store Fresh and Reissue balances by receiving the same from other vaults and examination halls.

Process Description:

The Exchange Vault shall perform following functions:

- Submit requirement to Fresh, Bonded, Chest Notes Vault in the system.
- Receive banknotes (Fresh, reissue) from Fresh, Bonded, Chest Notes Vaults and Examination Hall through QR code scanning.
- Create consignment for dispatch of Fresh and Reissue Notes Remittances to Chests, other BSC offices through QR code scanning.
- Issue Fresh and Reissue Notes to Exchange, Banking and Banks Payment Box Balances through QR code scanning.
- Receive Reissue and Fresh Notes from Evening Collection through QR code scanning.
- Transfer BPAS unfit packed banknotes to destruction team
- Inter-safe transfers/vault management

The processes are further elaborated under respective headings:

i. Receive Balance

This menu shall be used for receiving balances from various sources i.e. Fresh, Bonded, Chest Notes Vaults and Examination Halls. The balances shall be received through QR code scanning.

The first step for this process shall be creation of request for banknotes. For this purpose, the Exchange Vault Incharges shall use the transaction "Submit

Requirement" to lodge request for provision of banknotes. The user(s) shall submit this request separately to each vault and based on availability, the concerned vault shall either approve/amend or reject the request. In case of receipt from Examination Halls, this shall not be required.

Once the balances have been physically received, user(s) shall scan QR codes and use requisite transaction to receive the same in system. The system shall reconcile this responding entry against the originating entry made by sending Vault/Examination Hall, thereby reconciling as well as acknowledging receipt in system.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Exchange Account – Exchange Vault	1.Fresh Notes Stock Account Or 2.Chest Notes Vault Account (Invoice Account) Or 3.Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name Or Suspense Account – Examination Hall

ii. Remittance Dispatch

This menu shall be used for dispatching remittance comprising of Fresh/Reissue notes to other SBP BSC Offices and Chest Branches.

For this purpose, the originating entry shall be generated by the dispatching entity in the system. For creation of consignment, following steps shall be carried out:

a. Create Consignment
b. Scan QR codes of the logistic units (cash trays, boxes, pallets) in the Exchange Vault and make part of the consignment. Entire data of the logistic units shall be retrieved by the system and captured. Moreover, following fields shall be populated by the system based on data retrieved:
    - Denomination
    - Number of pieces
    - Number of logistic units
    - Date of consignment dispatch
    - Logistic Unit Number (to and from)

- Weight
- Value of the consignment (to be auto calculated by system)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

c. Dispatch the consignment created in the system. For this purpose, date of consignment dispatch shall be updated by the system. Further, following fields shall be populated by user(s) manually:
   - Name and details of Potdar
   - Name and details of In-Charge Police Escort

Upon committing this transaction, system shall generate originating entry for dispatch of remittance.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Currency Account	Exchange Account – Exchange Vault

iii. Cancel Remittance

This transaction shall enable user to cancel a dispatched remittance in the event a dispatched remittance returns without being received at the destination.
For this purpose, user shall input the consignment number and scan the QR Codes of logistic units to verify that there are no missing items.
This shall serve as a reversal of the corresponding transaction of remittance dispatch.

Input Fields:

- Consignment Number
- Number of pieces – Auto-calculated by system
- Number of boxes/logistic units – Auto-calculated by system
- Number of pallets – Auto-calculated by system
- Box/Logistic Unit Number (to and from)
- Pallet Number (to and from)
- To Safe
- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

Accounting Entry:

Debit	Credit
Exchange Account – Exchange Vault	Currency Account

iv. Issue to Box Balances

This menu shall be used for issuance of Fresh and Reissue banknotes to Exchange, Banking and Banks Payment Box Balances. For this purpose, user(s) shall scan individual bundles of Fresh and Reissue banknotes and subsequently issue the same to respective box balances through a selection from drop down menu in the transaction. The following fields shall be available in the system:

- Denomination
- Category of Notes (Reissue/ Fresh)
- Number of pieces
- Number of logistic units (boxes)
- Description (nature of transaction)
- Safe Number (from which balance is withdrawn)
- Account (Type of Box Balance)
- Teller ID of In-Charge Box Balance
- Value (to be auto calculated by system)

The entry created using this transaction shall be an originating entry, which shall be responded to by the receiving Box Balances in the system.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Exchange Account – Box Balance (Exchange, Banking or Banks Payment)	Exchange Account – Exchange Vault

v. Evening Collection Receipt

This menu shall be used for receiving Fresh and Reissue banknotes from Evening Collection through QR code scanning.

Once the balances have been physically received, user(s) shall scan QR codes and use requisite transaction to receive the same in system. The system shall reconcile this responding entry against the originating entry made by Incharge Evening Collection, thereby reconciling as well as acknowledging receipt in system. In this regard, complete bundles shall be received through QR code scanning whereas incomplete bundles and chit-packets shall be received through manual system entry.

Following fields shall be populated by the system based on data retrieved:

- Denomination
- Category of Notes

- Number of Pieces
- Value (to be auto calculated by system)
- QR Code Reference

Further, following fields shall be populated by user(s) manually – in case of chit packets:

- Denomination
- Category of Notes
- Number of Pieces (incomplete bundles)
- Value (to be auto calculated by system)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Exchange Account – Exchange Vault	Evening Collection – Reissue Account

vi. Inter-Safe Transfers and Logistics Unit Management

User(s) shall carry out safe-management of the vault through inter-safe transfers. However, the inter-safe transfer shall not affect the aging of the balance in the vault. Moreover, users shall also carry out box/logistic unit management by creating boxes/logistic units (including QR code generation, if required) for subsequent dispatch or storage. This shall involve creation of new QR code for box/pallet in case the original packaging has been opened.

Input Fields:

- Denomination
- Number of pieces – Auto-calculated by system
- Number of boxes/trays – Auto-calculated by system
- Number of pallets – Auto-calculated by system
- Box Number (to and from)
- Pallet Number (to and from)
- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)
- From Safe
- To Safe
- QR Code reference

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

vii. Transfer BPAS Unfit Packed to Destruction Team

This transaction shall be used for transferring BPAS processed unfit packed banknotes (reissue) from Exchange Vault to destruction team through QR code scanning. This shall also automatically change category from Reissue to Soiled

Input Fields:

- Denomination
- Category of notes- auto updated by system to soiled
- Number of pieces – Auto-calculated by system
- Logistic Unit Number (to and from) (optional)
- Value of the transferred balance

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Suspense Account - Destruction Team	Exchange Account – Exchange Vault

III. Coin Vault

The purpose of this vault is to receive coin remittances from Pakistan Mint or other SBP BSC offices, Chests etc. Subsequently, the coins are issued to a Coin Box from whereon the same are transferred to counters for public issuance. The Coin Vault also receives coins from the Coin Box at day end, which are result of receipts from the public.

Process Description:

The Coin Vault shall perform following functions:

- Receive Coin Remittances from Pakistan Mint, SBP BSC offices, Chests.
- Issue coins to Coin Box.
- Receive coins from Coin Box
- Send Remittances to SBP BSC offices, chests.
- Send uncurrent/defective coins to Pakistan Mint.
- Execute Reserve Securities transactions on coins.
- Inter-safe transfers.

The processes are further elaborated under respective headings:

i. Remittance Receipt

This menu shall be used for receiving remittance of coins from Pakistan Mint, SBP BSC offices and chests.

Although QR code based scanning shall exist, however, primarily, manual inputting shall be carried out to receive remittances. The entry carried out using these inputs shall be responding entries and shall record following data:

- Consignment Number

- Denomination(s)
- Quantity
- Potdar/Representative and PIN/CNIC Number
- Police Escort Name and Badge Number

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

In case of receipt from Mint

Debit	Credit
Coin Reserve Account - Received from Mint	Coin Account (Remittance from Mint)

In case of receipt from other SBP BSC office

Debit	Credit
Coin Reserve Account – Received from SBP BSC office	Coin Remittance Account

ii. Remittance Dispatch

This menu shall be used for dispatching remittance comprising of coins to Pakistan Mint, SBP BSC offices and chests.

For this purpose, the originating entry shall be generated by the dispatching entity in the system. For creation of consignment, following steps shall be carried out:

a. Create Consignment by mentioning the value to be dispatched
b. Input details of the consignment such as:
    - Denomination
    - Number of pieces
    - Weight
    - Potdar/Representative and PIN/CNIC Number
    - Police Escort Name and Badge Number
c. Dispatch the consignment created in the system.

Upon committing this transaction, system shall generate originating entry for dispatch of remittance.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

In case of dispatch to Mint

Debit	Credit

Coin Account (Remittance to Mint)	Coin Reserve Account

In case of dispatch to other SBP BSC office

Debit	Credit
Coin Remittance Account	Coin Account (Remittance to SBP BSC office)

iii. Cancel Remittance

This transaction shall enable user to cancel a dispatched remittance in the event a dispatched remittance returns without being received at the destination.
For this purpose, user shall input the consignment number to verify that there are no missing items.
This shall serve as a reversal of the corresponding transaction of remittance dispatch.

Input Fields:

- Consignment Number
- Number of pieces – Auto-calculated by system
- Number of bags/logistic units – Auto-calculated by system
- Bag/Logistic Unit Number (to and from)
- To Safe
- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)

Security Level:

The transaction shall have Level 0 Authorization i.e. 1 inputter only

Accounting Entry:

In case of dispatch to Mint

Debit	Credit
Coin Reserve Account	Coin Account (Remittance to Mint)

In case of dispatch to other SBP BSC office

Debit	Credit
Coin Account (Remittance to SBP BSC office)	Coin Remittance Account

iv. Coin Box

This menu shall be used for issuance to/ receipt from Coin Box. The user shall input the denomination(s), quantity (ies) of coins manually in dedicated fields.

The entry created using this transaction shall be an originating entry, which shall be responded to by the receiving Coin Box in the system.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Coin Exchange Account - Counted	Coin Reserve Account
Coin Exchange Account - Uncounted	Coin Reserve Account

v. Inter-safe Transfers

User(s) shall carry out safe-management of the vault through inter-safe transfers.

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

vi. Reserve Securities Transactions

These inputs shall be used to transfer of coins to/from Reserve Securities as part of Banking Vault Dr/Cr.

Accounting Entry:
Receipt from Banking:

Debit	Credit
Reserve Securities Coin	Liability Account

Transfer to Reserve Securities:

Debit	Credit
Reserve Securities Coin	Stock Account Counted Coins

Transfer from Reserve Securities:

Debit	Credit
Stock Account Counted Coins	Reserve Securities Coin

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

IV. Bonded Notes Vault

The purpose of this vault is to receive cash deposits of various categories (such as Reissue, Soiled, Defective) from Commercial Banks. The cash received is stored in bins and transferred onwards for other operations such as Examination, Issuance, and Remittance etc.

Process Description:
The Bonded Notes Vault shall perform following functions:

- Receive request for deposits from Commercial Banks.
- Receive deposit (Reissue, soiled, unsorted,) from Commercial Banks through QR code scanning.

- Carry out Safe Management of balances held through inter-safe transfers.
- Transfer balances to Balance Preparation Hall and receive back prepared balance. All transfers and receipt to be carried out through QR code scanning.
- Transfer balances to Examination Hall through QR code scanning.
- Transfer balances to Exchange Vault, Cancelled Notes Vault through QR code scanning.
- Create consignment for dispatch of balances to Chests, other BSC offices through QR code scanning.

The processes are further elaborated under respective headings:

i. Receive Deposit

This menu shall be used for receiving balances from commercial banks through QR code scanning. The categories of banknotes that can be received shall be reissue, soiled, unsorted or any other category later on added by user(s).

The first step for this process shall be approval/amendment/rejection of request for deposit from Commercial Banks. In case of approval/amendment, suitable date shall be assigned to the bank for deposit. This shall be carried by the officials of the Currency Management Unit, following which the Vault Users shall get a notification in their dashboard for the deposit.

Next, the banknotes shall be physically brought to the Bonded Notes Vault premises for deposit by concerned bank. For this this purpose, the order ID/consignment no. shall be selected to fetch relevant details such as name of accompanying bank rep, denomination(s), quantity, value, category, QR codes of trays included in consignment, serial numbers of seals applied to cash trays etc.
Upon physically receiving the banknotes, user(s) at Bonded Notes Vault shall access the consignment details via consignment number and scan the cash tray(s) received which shall accordingly reconcile the particulars against consignment data

<u>Populated Fields (these fields shall be auto-filled and auto-retrieved by the system based on QR codes scanned):</u>

- Number of trays (auto-retrieved by the system based on QR codes scanned)
- Denominations and number of pieces (auto-retrieved by the system based on QR codes scanned)
- Consignment/order no.
- Category of banknotes
- Value (auto-calculated by the system based on denominations and pieces)
- Depositing Bank
- Destination Safe

<u>Security Level:</u>
The transaction shall be a responding entry and require no inputting but rather authorization (with/without amendment) in system.

System shall reconcile the scanned tray(s) against consignment details in system to achieve matching. If matched, user(s) shall receive the deposit and credit the concerned Commercial Bank account through T-24 Banking. The transaction shall be initiated from CBA and settled in T-24 Banking.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name	Liability Account CBA

Financial Entry:

Debit	Credit
Liability Account – T24 Banking	Commercial Bank – Current Account

The transaction shall appear as unauthorized in the T-24 Banking whereupon it shall be authorized by a related official.

ii. Deduction of Charges

At the time of receiving deposit from commercial bank, system shall auto debit the commercial bank by a pre-set percentage of the value of deposited amount through Core Banking interface. As this is a Management decision therefore changes shall be made centrally, only after requisite approvals and the system shall allow only Super Administrator user to update the percentage value based on which deduction shall be made.
However, following parameters shall be updated in system by Super User/Super Administrator.

- Percentage of variable rate charge
- To be deducted on:
  - Re-issue Only
  - Soiled Only
  - Soiled and Re-issue

Accounting Entry:

Debit	Credit
Commercial Bank – Current Account	BSC Deposit Account

iii. Remittance Dispatch

This menu shall be used for dispatching remittance comprising of Reissue, unsorted, soiled, machine reject (or any other category defined later on) to other SBP BSC offices and Chests.

For this purpose, the originating entry shall be generated by the dispatching entity in the system. For creation of consignment, following steps shall be carried out:

a. Create consignment by assigning a consignment code and mentioning required value of banknotes to be dispatched.
b. Scan QR codes of the logistic units (cash trays, boxes, pallets) in the Bonded Notes Vault and make part of the consignment. Entire data of the logistic units shall be retrieved by the system and captured. Moreover, following fields shall be populated by the system based on data retrieved:
    - Denomination
    - Number of pieces
    - Number of logistic units
    - Date of consignment dispatch
    - Logistic Unit Number (to and from)
    - Weight
    - Safe number

    Security Level:
    The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

c. Dispatch the consignment created in the system. For this purpose, date of consignment dispatch shall be updated by the system. Further, following fields shall be populated by user(s) manually:
    - Name and details of Potdar
    - Name and details of In-Charge Police Escort
    - Name of accompanying bank representatives

    Upon committing this transaction, system shall generate originating entry for dispatch of remittance.

    Security Level:
    The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Currency Account	Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name

iv. Cancel Remittance

This transaction shall enable user to cancel a dispatched remittance in the event a dispatched remittance returns without being received at the destination.
For this purpose, user shall input the consignment number and scan the QR Codes of logistic units to verify that there are no missing items.
This shall serve as a reversal of the corresponding transaction of remittance dispatch.

Input Fields:

- Consignment Number
- Number of pieces – Auto-calculated by system
- Number of boxes/logistic units – Auto-calculated by system
- Number of pallets – Auto-calculated by system
- Box/Logistic Unit Number (to and from)
- Pallet Number (to and from)
- To Safe
- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only

Accounting Entry:

Debit	Credit
Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name	Currency Account

v. Intra-Office Transfers

This menu shall be used for carrying out intra-office transfer of balances from Bonded Notes Vault. The balances shall be transferred to four areas:

- Balance Preparation Hall
  Banknotes shall be transferred to Balance Preparation Hall using QR code scanning or manual entry. This shall serve as Originating Entry which shall be responded to by the receiving Balance Preparation Hall.
  The Bonded Notes Vault through QR code scanning or manual entry shall receive subsequently prepared balance. This shall be a Responding Entry to the Originating Entry from Balance Preparation Hall.

  Accounting Entry:

Debit	Credit

Suspense Account – Preparation Hall	Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name

- Examination Hall

  Banknotes shall be transferred to Examination Hall (Manual, DNS, BPAS or any other procedure added later on) using QR code scanning. This shall serve as Originating Entry, which shall be responded to by the receiving Examination Hall.

  Subsequently, Bonded Notes Vault may (optional) receive any machine unprocessable/ unexaminable balance back from the Examination Hall. This shall be a Responding Entry to the Originating Entry from Examination Hall. The quantity of balances received back may be different from the balance initially sent out from the Vault.

  Accounting Entry:

Debit	Credit
Suspense Account – Examination Hall	Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name

- Exchange Vault

  Banknotes shall be transferred to Exchange Vault using QR code scanning. This shall serve as Originating Entry, which shall be responded to by the receiving Exchange Vault.

  Accounting Entry:

Debit	Credit
Exchange Account – Exchange Vault	Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name

Security Level:

All the above transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

vi. Inter-safe Transfers

User(s) shall carry out safe-management of the vault through inter-safe transfers. Moreover, users shall also carry out box/logistic unit management by creating boxes/logistic units (including QR code generation, if required) for subsequent dispatch or storage.

Input Fields:

- Denomination and pieces

- From Safe/Category
- To Safe/Category
- Value (Auto-calculated by the system)
- QR Code Reference

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

vii. Bin/Safe Verification of Balances

This menu shall be used by the Vault Incharges to carry out verification of balances in the Bonded Notes Vault. For this purpose, the official(s) shall scan QR Codes of the cash trays present in the Bonded Notes Vault. For this purpose, the process shall be as under:

- Concerned official(s) inputs bin/safe number which is to be verified.
- User scans QR Codes of the trays physically held in the bin being verified.
- System matches the scanned QR codes against QR codes of trays held in the safe/bin in the system.
- Upon scan of each QR code, system carries out matching and at the end of scanning process, system gives a list of trays that have been matched as well as identifies unmatched/unavailable trays.
- Consequent to matching against physical position, the Sr. Officer Vault shall "Verify" balance in the system and concerned ACM Vault shall authorize the transaction.

V. Chest Notes Vault

The purpose of this vault is to receive banknotes remittances of various categories (such as Reissue, Soiled, Defective, Machine Reject) from other SBP BSC offices and Chests. The cash received is stored in bins and transferred onwards for other operations such as Examination, Issuance, and Remittance etc.

Process Description:
The Chest Notes Vault shall perform following functions:

- Receive banknotes remittances from SBP BSC offices and Chests. The banknotes shall comprise of various categories such as Reissue, Soiled, Unsorted, Machine Reject or any other category added later on.
- Carry out Safe Management of balances held through inter-safe transfers.
- Transfer balances to Balance Preparation Hall and receive back prepared balance. All transfers and receipt to be carried out through QR code scanning.
- Transfer balances to Examination Hall through QR code scanning.
- Transfer balances to Exchange Vault, Cancelled Notes Vault through QR code scanning.
- Create consignment for dispatch of balances to Chests, other BSC offices through QR code scanning.

The processes are further elaborated under respective headings:

i. Remittance Receipt

This menu shall be used for receipt of remittances from other SBP BSC offices and Chests.

For this purpose, the originating entry shall be generated by the dispatching entity in the system. Upon arrival of remittance at the receiving office, user(s) shall:

a. Scan QR codes of the Logistic Units received in the consignment whereupon entire data of the contents of Logistic Units shall be retrieved by the system and captured.

At this point, system shall match the scanned QR codes against those included in the consignment to carry out automated reconciliation. In case reconciliation is not achieved, system shall allow user(s) to carry out examination of balance in order to determine discrepancies.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

b. Receive Remittance in the system through a responding entry whereupon the contents of the captured consignment shall be taken into inventory of the receiving office.

This shall be possible only if:

- Reconciliation is achieved at Capture Consignment stage
- Balance has been examined through examination hall and discrepancies have been adjusted accordingly.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Chest Notes Vault Account (Invoice Account)	Currency Account

ii. Remittance Dispatch

This menu shall be used for dispatching remittance comprising of Reissue, unsorted, soiled, machine reject (or any other category defined later on) to other SBP BSC offices and Chests.

For this purpose, the originating entry shall be generated by the dispatching entity in the system. For creation of consignment, following steps shall be carried out:

a. Scan QR codes of the logistic units in the Chest Notes Vault and make part of the consignment. Entire data of the logistic units shall be retrieved by the system and

captured. Moreover, following fields shall be populated by the system based on data retrieved:

- Denomination
- Number of pieces
- Number of logistic units
- Date of consignment dispatch
- Logistic Unit Number (to and from)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

b. Dispatch the consignment created in the system. For this purpose, date of consignment dispatch shall be updated by the system. Further, following fields shall be populated by user(s) manually:
   - Name and details of In-Charge Police Escort
   - Name of accompanying Chest Potdar/SBP BSC office Potdar

   Upon committing this transaction, system shall generate originating entry for dispatch of remittance.

   Security Level:
   The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

   Accounting Entry:

Debit	Credit
Currency Account	Chest Notes Vault Account (Invoice Account)

iii. Cancel Remittance

This transaction shall enable user to cancel a dispatched remittance in the event a dispatched remittance returns without being received at the destination.
For this purpose, user shall input the consignment number and scan the QR Codes of logistic units to verify that there are no missing items.
This shall serve as a reversal of the corresponding transaction of remittance dispatch.

Input Fields:

- Consignment Number
- Number of pieces – Auto-calculated by system
- Number of boxes/logistic units – Auto-calculated by system
- Number of pallets – Auto-calculated by system
- Box/Logistic Unit Number (to and from)
- Pallet Number (to and from)
- To Safe

- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)

Security Level:

The transaction shall have Level 0 Authorization i.e. 1 inputter only

Accounting Entry:

Debit	Credit
Chest Notes Vault Account (Invoice Account)	Currency Account

iv. Intra-Office Transfers

This menu shall be used for carrying out intra-office transfer of balances from Chest Notes Vault. The balances shall be transferred to four areas:

- Balance Preparation Hall

  Banknotes shall be transferred to Balance Preparation Hall using QR code scanning. This shall serve as Originating Entry, which shall be responded to by the receiving Balance Preparation Hall.

  The Chest Notes Vault through QR code scanning shall receive subsequently prepared balance. This shall be a Responding Entry to the Originating Entry from Balance Preparation Hall.

  Accounting Entry:

Debit	Credit
Suspense Account – Preparation Hall	Chest Notes Vault Account (Invoice Account) – Chest Name

- Examination Hall

  Banknotes shall be transferred to Examination Hall (Manual, DNS, BPAS or any other procedure added later on) using QR code scanning. This shall serve as Originating Entry, which shall be responded to by the receiving Examination Hall.

  Subsequently, Chest Notes Vault may (optional) receive any machine unprocessable/ unexaminable balance back from the Examination Hall. This shall be a Responding Entry to the Originating Entry from Examination Hall. The quantity of balances received back may be different from the balance initially sent out from the Vault.

  Accounting Entry:

Debit	Credit

Suspense Account – Examination Hall	Chest Notes Vault Account (Invoice Account) –Chest Name

- Exchange Vault
  Banknotes shall be transferred to Exchange Vault using QR code scanning. This shall serve as Originating Entry, which shall be responded to by the receiving Exchange Vault.

  Accounting Entry:

Debit	Credit
Exchange Account – Exchange Vault	Chest Notes Vault Account (Invoice Account) –Chest Name

Security Level:
All the above transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

v. Inter-safe Transfers

User(s) shall carry out safe-management of the vault through inter-safe transfers. Moreover, users shall also carry out box/logistic unit management by creating boxes/logistic units (including QR code generation, if required) for subsequent dispatch or storage.

Input Fields:

- Denomination and pieces
- From Safe/Category
- To Safe/Category
- Value (Auto-calculated by the system)

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

vi. Bin/Safe Verification of Balances

This menu shall be used by the Vault Incharges to carry out verification of balances in the Chest Notes Vault. For this purpose, the official(s) shall scan QR Codes of the cash trays present in the Chest Notes Vault. For this purpose, the process shall be as under:

- Concerned official(s) inputs bin/safe number which is to be verified.
- User scans QR Codes of the trays physically held in the bin being verified.
- System matches the scanned QR codes against QR codes of trays held in the safe/bin in the system.
- Upon scan of each QR code, system carries out matching and at the end of scanning process, system gives a list of trays that have been matched as well as identifies unmatched/unavailable trays.

- Consequent to matching against physical position, the Sr. Officer Vault shall "Verify" balance in the system and concerned ACM Vault shall authorize the transaction.

VI. Cancelled Notes Vault

The purpose of this vault is to store banknotes of categories such as Soiled, Defective, defaced etc. received from counters of the office or as remittance from other SBP BSC (Linked) offices. Subsequently, such balances shall be routed through Examination Halls and subsequently destroyed.

Process Description:

The Cancelled Notes Vault shall perform following functions:

- Receive banknotes remittances from SBP BSC offices and Chests. The banknotes shall comprise of various categories such as soiled, defective, defaced or any other category added later on.
- Carry out Safe Management of balances held through inter-safe transfers.
- Transfer balances to Examination Hall through QR code scanning.
- Create consignment for dispatch of balances to other BSC offices through QR code scanning / manual entry.
- Receive banknotes of soiled, defective, defaced categories from Evening Collection.
- Dispatch, receive and destroy misprint notes

The processes are further elaborated under respective headings:

i. Remittance Receipt

This menu shall be used for receipt of remittances of soiled, defective, defaced categories from other SBP BSC offices.

For this purpose, the originating entry shall be generated by the dispatching entity in the system. Upon arrival of remittance at the receiving office, user(s) shall:

a. Capture consignment
b. Scan QR codes of the Logistic Units received in the consignment whereupon entire data of the contents of Logistic Units shall be retrieved by the system and captured.

At this point, system shall match the scanned QR codes against those included in the consignment to carry out automated reconciliation. In case reconciliation is not achieved, system shall allow user(s) to carry out examination of balance in order to determine discrepancies.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

c. Receive Remittance in the system through a responding entry whereupon the contents of the captured consignment shall be taken into inventory of the receiving office.

This shall be possible only if:

i. Reconciliation is achieved at Capture Consignment stage
ii. Balance has been examined through examination hall and discrepancies have been adjusted accordingly.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Cancelled Notes Vault Account	Currency Account

ii. Remittance Dispatch

This menu shall be used for dispatching remittance comprising of soiled, defaced, defective (or any other category defined later on) to other SBP BSC offices.

For this purpose, the originating entry shall be generated by the dispatching entity in the system. For creation of consignment, following steps shall be carried out:

a. Create consignment by creating consignment ID and mentioning value of consignment to be sent.
b. Scan QR codes of the bundles/manually input banknotes details and generate QR codes for Logistic Units (cash tray(s)).
c. Scan logistic units in the Cancelled Notes Vault and make part of the consignment. Entire data of the logistic units shall be retrieved by the system and captured. Moreover, following fields shall be populated by the system based on data retrieved:
    - Denomination
    - Number of pieces
    - Number of logistic units
    - Date of consignment dispatch
    - Logistic Unit Number (to and from)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

d. Dispatch the consignment created in the system. For this purpose, date of consignment dispatch shall be updated by the system. Further, following fields shall be populated by user(s) manually:
    - Name and details of In-Charge Police Escort
    - Name of accompanying SBP BSC office Potdar

Upon committing this transaction, system shall generate originating entry for dispatch of remittance.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Currency Account	Cancelled Notes Vault Account

iii. Cancel Remittance

This transaction shall enable user to cancel a dispatched remittance in the event a dispatched remittance returns without being received at the destination.
For this purpose, user shall input the consignment number and scan the QR Codes of logistic units to verify that there are no missing items.
This shall serve as a reversal of the corresponding transaction of remittance dispatch.

Input Fields:

- Consignment Number
- Number of pieces – Auto-calculated by system
- Number of boxes/logistic units – Auto-calculated by system
- Number of pallets – Auto-calculated by system
- Box/Logistic Unit Number (to and from)
- Pallet Number (to and from)
- To Safe
- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only

iv. Intra-Office Transfers

This menu shall be used for carrying out intra-office transfer of balances from Cancelled Notes Vault. The balances shall be transferred to following areas:

- Examination Hall

Banknotes shall be transferred to Examination Hall (Manual, DNS, BPAS or any other procedure added later on) using QR code scanning / manual entry. This shall serve as Originating Entry, which shall be responded to by the receiving Examination Hall.

Subsequently, Chest Notes Vault may (optional) receive any machine unprocessable/ unexaminable balance back from the Examination Hall. This shall be a Responding Entry to the Originating Entry from Examination Hall. The quantity of balances received back may be different from the balance initially sent out from the Vault.

Security Level:
All the above transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Suspense Account – Examination Hall	Cancelled Notes Vault Account

v. Inter-safe Transfers

User(s) shall carry out safe-management of the vault through inter-safe transfers. Moreover, users shall also carry out box/logistic unit management by creating boxes/logistic units (including QR code generation, if required) for subsequent dispatch or storage.

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

vi. Evening Collection Receipt

This menu shall be used for receiving soiled, defective, defaced banknotes from Evening Collection through QR code scanning.

Once the balances have been physically received, user(s) shall scan QR codes and use requisite transaction to receive the same in system. The system shall reconcile this responding entry against the originating entry made by Incharge Evening Collection, thereby reconciling as well as acknowledging receipt in system. In this regard, complete bundles shall be received through QR code scanning whereas incomplete bundles and chit-packets shall be received through manual system entry.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Cancelled Notes Vault Account	Evening Collection – Defective/Soiled Account

vii. Dispatch, Receipt & Destruction of Misprint Notes

This transaction shall be used by the office for dispatching misprint notes consignments to PSPC. For this purpose, the user shall manually input the following details:

- Denomination
- Pieces

- Value

Accounting Entry for Dispatch to PSPC:

Debit	Credit
Suspense Account – PSPC Misprint Notes	Cancelled Notes Vault Account

Accounting Entry for Receipt from PSPC:

Debit	Credit
Cancelled Notes Vault Account	Suspense Account – PSPC Misprint Notes

Accounting Entry for Destruction of Misprint Notes:

Debit	Credit
Suspense Account – Destroyed	Cancelled Notes Vault Account

b. Counters & Back Office

Counters are operated at SBP BSC field offices for providing various services to the general public and other stakeholders, including issuance of fresh notes and coins, providing exchange note/coin facility and exchange of defective (i.e. damaged) banknotes. In addition, a back office structure (in the form of Box Balances and Evening Collection) also facilitates the counters during the day and acts as intermediary with the various vaults.

I. Banks Payment Box:

Bank Payment box is utilized to store currency notes of different denominations and categories for further issuance to commercial banks.

Process Description:

The banks payment box shall perform following functions:

- Placement of indent with exchange vault for daily operations as per demand received from commercial banks as per laid down rules.
- Receive physical balance from exchange vault along with system acknowledgement through QR code scanning.
- Handover balance to commercial banks through QR code scanning.
- Reconciliation of system report with physical balance at close of operations.

The processes are further elaborated under respective headings:

i. Placement of Indent:

This menu shall be used to place indent with exchange vault for issuance. In this menu, user will have an option to input desired quantity of notes available in exchange vault. This menu shall include following details: -

- Teller ID
- Denomination and pieces
- Amount (auto-calculated by system)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

ii. Receipt of Indent:

This menu shall be used to acknowledge receipt of balance from exchange vault after physical verification of the balance. This shall be responding entry for originating entry by exchange vault for issuance of indent. Complete bundles shall be received through QR code scanning while incomplete bundles and chit packets will be received through manual system entry.

Populated Fields:

- Transaction ID for issuance from Exchange Vault
- Denomination and pieces (auto-fetched from system)
- Category (auto-fetched from system)
- QR Code reference

Security Level:
Since it is a responding entry/acknowledgement, therefore zero level authorization.

iii. Issuance to Banks:

This menu shall be used to transfer notes from box to commercial banks against payment already received through RTGS/ATS. This entry shall be linked with transfer entry from RTGS/ATS to main account. Balance shall be issued through QR code scanning for bundles.

This menu shall have following details: -

- Teller ID
- Bank Name
- Corresponding RTGS/ATS entry reference number
- Amount
- Category
- Denomination and pieces of Notes – auto-fetched in case of QR code scan or manually inputted if QR code scanning not available
- Logistic Unit Number (to and from)/QR code numbers
- Cypher Details. This field will be optional
- One Time Passcode generated by the system
- Reason/rationale for issuance – drop down from fixed items

Security Level:
Single level authorization i.e. 1 inputter and 1 authorizer.

Accounting Entry:

Receiving indent	
Debit	**Credit**

Exchange Account – Banks Payment Box	Exchange Account – Exchange Vault
Issuance	
Debit	**Credit**
Liability Account CBA	Exchange Account – Banks Payment Box
Issuance (Financial Transaction)	
Debit	**Credit**
Commercial Bank RTGS/ATS Transaction	Banks Payment Account– T24 Banking
Banks Payment Account – T24 Banking	Liability Account – T-24 Banking

iv. Issuance to Banks – if RTGS/ATS unavailable:

This menu shall be used to transfer notes from box to commercial banks against cheque received from commercial banks. The cheque shall be inputted in T-24 Banking wherein following accounts shall be credited/debited.

This menu shall have following details: -

- Teller ID
- Bank Name
- Cheque Number
- Amount
- Category
- Denomination and pieces of Notes
- Logistic Unit Number (to and from)/QR code numbers – auto-fetched in case of QR code scan or manually inputted if QR code scanning not available
- Cypher Details. This field will be optional
- One Time Passcode generated by the system
- Reason/rationale for issuance – drop down from fixed items

Security Level:
Single level authorization i.e. 1 inputter and 1 authorizer.

In CBA	
Debit	**Credit**
Liability Account CBA	Exchange Account – Banks Payment Box

Issuance against cheque (Financial Transaction) T-24 Banking	
Debit	**Credit**
Commercial Bank Current Account	Liability Account – T-24 Banking

The transaction shall appear as unauthorized in T-24 Banking and therefore require authorization.

Balance shall be issued through QR code scanning for bundles.

v. Application of Variable Rate Charge:

This menu shall be automatically triggered once transaction for issuance of banknotes to commercial bank (step iii & iv) is executed and authorized. The transaction at this stage shall entail deduction of certain percentage from commercial bank commensurate with value of issuance made to said commercial bank. However, following parameters shall be set in system by Super User/Super Administrator.

- Percentage of variable rate charge
- To be deducted on:
    - Fresh Only
    - Re-issue Only
    - Fresh and Re-issue

These are policy level decisions and therefore shall only be changed consequent to approval of Management and shall only be changed by System Administrator User at SPU-Finance SBP and/or SCAD BSC.

This menu shall have following details auto-fetched by the system based on transaction reference number generated at step iii or iv: -

- Transaction Reference Number – Inputted by User
- Teller ID – Auto-fetched
- Bank Name – Auto-fetched
- Corresponding RTGS/ATS entry reference number – Auto-fetched
- Amount Issued – Auto-fetched
- Category – Auto-fetched
- Rate Charged – Auto-fetched
- Value to be deducted based on Rate Charged – Auto-calculated by system

Security Level:
Single level authorization i.e. 1 inputter and 1 authorizer.

Accounting Entry (Financial Impact):

Debit	**Credit**
Commercial Bank – Current Account	BSC Deposit Account

vi. Acknowledgement by Banks

This menu will be used by authorized officials of Banks to acknowledge receipt of payment by responding to originating entry by banks payment box In-Charge. For this purpose, the system shall have functionality of generating random One Time Passcode (OTP) at the time of approval of issuance request by SBP BSC office.

This OTP shall be generated once the SBP BSC users have accepted request for issuance of banknotes to the commercial bank and the OTP shall only be visible to concerned Commercial Bank user.

Upon receiving the banknotes, the concerned Commercial Bank representative shall share the OTP with SBP BSC user. The SBP BSC user shall enter OTP in this transaction to mark acknowledgement of receipt of banknotes by the commercial bank.

vii. Reconciliation:

At the end of the day's operations and confirmation by banks regarding receipt of payment, box incharge will ensure that banks payment box is showing zero physical as well as system balance as all bank payment will be settled by day end.

viii. Reports:

Above menu shall have reports representing total balance in box and movement of balance during the day by representing transactions carried out all day for box In-Charge to reconcile at day end. Example of reports are below:

- E-8 (details of each indent and issuance from box)
- E-4 (describes opening balance, indent to box, issuance from box, closing balance)
- Reissue payment to banks (date wise and bank wise)
- Fresh payment to banks (date wise and bank wise)
- Bank Payment Fresh Note Cypher Report (Current and Historical)
- RTGS/ATS related reports

II. Exchange Box:

Exchange box is utilized to store currency notes of different denominations and categories for further issuance to exchange counters without having to resort to exchange vault from time to time.

Process Description:

The exchange box shall perform following functions:

- Placement of indent with exchange vault for daily operations as per demand at counters.
- Receive physical balance from exchange vault along with system acknowledgement.
- Transfer balance to exchange counter through QR code scanning.
- Frequent replenishment of counters as per need during the day.
- Reconciliation of system report with physical balance at close of operations.

The processes are further elaborated under respective headings:

i. Placement of Indent:

This menu shall be used to place indent with exchange vault for issuance. In this menu, user will have an option to select desired quantity of available notes. This menu shall include following details:

- Teller ID
- Denomination and pieces
- Amount (auto-calculated by system)

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

ii. Receipt of Indent:

This menu shall be used to acknowledge receipt of balance from exchange vault after physical verification of the balance. This shall be responding entry for originating entry by exchange vault for issuance of indent. Complete bundles shall be received through QR code scanning while incomplete bundles and chit packets will be received through manual system entry.

Populated Fields:

- Transaction ID for issuance from Exchange Vault
- Denomination and pieces (auto-fetched from system)
- Category (auto-fetched from system)

Security Level:

Since it is a responding entry/acknowledgement, therefore zero level authorization.

iii. Issuance to Counters:

This menu shall be used to transfer notes from box to counters. It shall be able create originating entries through QR code scanning for bundles and manual entries for packets and chit packets:

This menu shall have following details:

- Teller ID
- Amount (auto-calculated by the system)
- Category of banknotes
- Denomination and pieces
- Logistic Unit Number (to and from)/QR code numbers

This menu will be used for replenishment of counters throughout the day as per requirement therefore multiple entries can be carried out through this menu.

Security Level:

Single level authorization i.e. 1 inputter and 1 authorizer.

Accounting Entry:

Receive Indent	
Debit	**Credit**
Exchange Account – Exchange Box	Exchange Account – Exchange Vault

Issuance	
Debit	**Credit**
Teller Stock Account	Exchange Account – Exchange/Banking Box

iv. Reconciliation: -

At the end of the day's operations and confirmation by counters for no more requirement, box In-Charge will carry out verification of physical balance with that of system report and close the box if balance is reconciled.

v. Reports:

Above menu shall have reports representing total balance in box and movement of balance during the day by representing transactions carried out all day making it easy for box In-Charge to reconcile at day end. Example of reports are below:

- E-7(a) showing transfer of notes to different counters
- E-8 (details of each indent and issuance from box)
- E-4 (describes opening balance, indent to box, issuance from box, closing balance)

III. Coin Box:

Coin box is utilized to store coins for further issuance to counters without having to resort to coin vault from time to time.

Process Description:

The coin box shall perform following functions:

- Placement of indent with coin vault for daily operations as per demand at counters.
- Receive physical balance from coins' vault along with system acknowledgement.
- Transfer of counted balance to coin counter for issuance to general public/banks.
- Transfer of uncounted balance for shroffing and receiving it back.
- Receive coins back from coin counter at close of counter operations.
- Transfer coins to coins' vault.

The processes are further elaborated under respective headings:

i. Placement of Indent:

This menu shall be used to place indent with coins' vault for issuance. In this menu, user will have an option to select desired quantity of available coins. This menu shall include following details: -

- Teller ID

- Category of coins
- Denomination and pieces of coins
- Amount (auto-calculated by system)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

ii. Receipt of Indent:

This menu shall be used to acknowledge receipt of balance from coins' vault after physical verification of the balance. This shall be responding entry for originating entry by coins' vault for issuance of indent.

Security Level:
Since it is a responding entry/acknowledgement therefore zero level authorization.

iii. Issuance to Counters and Shroffing:

This menu shall be used to transfer coins from box. There shall be following inputs in order to carry out multiple functions and create originating entries related to coins' box:

- Transfer counted balance to counter
- Transfer uncounted balance to shroffing

Above inputs shall have following details:

- Teller ID
- Category of coins
- Denomination and pieces of coins
- Amount (auto-calculated by system)

Security Level:
Single level authorization i.e. 1 inputter and 1 authorizer.

Accounting Entry:
For transfer to Counter

Debit	Credit
Teller Stock Account	Coin Exchange Account - Counted

For transfer to Shroff

Debit	Credit
Teller Stock Account	Coin Exchange Account - Uncounted

iv. Transfer Counted Coin from Shroffing:

This menu shall be used by user to transfer back counted coins from the shroffs to coin box. For this purpose, user shall input following details manually:

- Teller ID
- Transaction reference number via which coins transferred to Shroff for counting.

- Category of coins
- Denomination and pieces of coins
- Amount (auto-calculated by system)
- Discrepancies (selection from drop down menu, containing defective, counterfeit, shortage, excess etc.)

Along with transferring back the coin to Coin Box, the version shall also Document any issue/shortfall detected during shroffing.

Accounting Entry:

For transfer to Coin Box:

Debit	Credit
Coin Exchange Account - Counted	Teller Stock Account

For recording discrepancies:

Excess

Debit	Credit
Suspense Account – Coins Discrepancy - Excess	Teller Stock Account

Shortage

Debit	Credit
Teller Stock Account	Suspense Account – Coins Discrepancy - Shortage

v. Resolution of Discrepancies in Shroffing:

This menu shall be used to make good shortages/discrepancies detected during coin shroffing:

- Teller ID
- Transaction reference number via which coins were transferred to Shroff for counting.
- Category of coins
- Denomination and pieces of coins
- Amount (auto-calculated by system)
- Nature of discrepancy – Auto-fetched from system record
- Discrepant pieces and value – Auto-fetched from system record
- Discrepancies being made good (selection from drop down menu, containing defective, counterfeit, shortage, excess etc.)

Security Level:

Single level authorization i.e. 1 inputter and 1 authorizer.

Accounting Entry:

Debit	Credit
Coin Exchange Account - Counted	Suspense Account – Coins Discrepancy

vi. Acknowledgement for Receipt from Shroff:

This menu shall be used by Incharge Coin Box to acknowledge receipt of balances from shroffs, consequent to counting. User shall input following items:

- Transaction ID via which Shroff has transferred balance to Coin Box

Furthermore, following details shall be auto-fetched based on inputted transaction ID:

- Category of coins
- Denomination, pieces and value
- Discrepancies detected

The user shall acknowledge the transaction in the system.

vii. Receipt of Balance from Counters and Transfer Back to Vault:

This menu shall be used to acknowledge receipt of coins back from coin counter by responding to an originating entry. Furthermore, this menu shall have a transaction to create originating entry for transfer of coins back to vault from box.
Above inputs shall have following details:

- Teller ID
- Amount (auto-calculated by system)
- Category of coins
- Denomination and pieces of coins

Security Level:

Acknowledgment shall have zero level authorization. Originating transaction to vault shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

Accounting Entry:

Receive Indent	
Debit	**Credit**
Coin Exchange Account - Counted/Uncounted	Coin Reserve Account - Counted/Uncounted

Transfer to Shroffs	
Debit	**Credit**
Coin Shroff Account (Till of Receiving User)	Coin Box - Unexamined

Receive from Shroffs	
Debit	**Credit**

Coin Box - Examined	Coin Shroff Account (Teller Stock Accounts))

Transfer to Counter	
Debit	**Credit**
Teller Stock Account	Coin Exchange Account - Counted

Transfer to Vault	
Debit	**Credit**
Coin Exchange Account - Counted/Uncounted	Coin Reserve Account – Examined Coin Reserve Account – Unexamined

viii. Coin Category Change:

Coin Box Incharge shall change category of uncounted coin to counted, without shroffing, in case no discrepancies are observed.

Accounting Entry:

Debit	**Credit**
Coin Exchange Account - Counted	Coin Exchange Account - Uncounted

Security Level:
This shall be a Level 0 transaction i.e. not requiring any authorization.

ix. Issuance of Coins to Commercial Banks:

This transaction shall enable user to issue examined coins to commercial banks against payment already received through RTGS/ATS. This entry shall be linked with transfer entry from RTGS/ATS to main account. Balance shall be issued through QR code scanning for bundles.

This menu shall have following details: -

- Teller ID
- Bank Name
- Corresponding RTGS/ATS entry reference number
- Amount
- Category
- Denomination of coins and pieces being issued
- One Time Passcode generated by the system

Security Level:
Single level authorization i.e. 1 inputter and 1 authorizer.

Accounting Entry:

Issuance	
Debit	**Credit**
Liability Account CBA	Coin Exchange Account - Counted
Issuance (Financial Transaction)	
Debit	**Credit**
Commercial Bank RTGS/ATS Transaction	Banks Payment Account– T24 Banking
Banks Payment Account – T24 Banking	Liability Account – T-24 Banking

x. Acknowledgement by Banks

This menu will be used by authorized officials of banks to acknowledge receipt of payment by responding to originating entry by banks payment box In-Charge. For this purpose, the system shall have functionality of generating random One Time Passwords (OTP) at the time of approval of issuance request by SBP BSC office.

This OTP shall be generated once the SBP BSC users have accepted request for issuance of coins to the commercial bank and the OTP shall only be visible to concerned Commercial Bank user.

Upon receiving the banknotes, the concerned commercial bank representative shall share the OTP with SBP BSC user. The SBP BSC user shall enter OTP in this transaction to mark acknowledgement of receipt of banknotes by the commercial bank.

xi. Reports:

Above menu shall have reports representing total balance in box and movement of balance during the day by representing transactions carried out all day making it easy for box In-Charge to reconcile.

IV. Banking Box:

Banking Box is utilized for storage of balances that are to be issued to Banking counters i.e. counters operating in T-24 Banking i.e. Prize Bonds, Banking etc.

Process Description:

The banks payment box shall perform following functions:

- Placement of indent with exchange vault for daily operations as per daily requirement.
- Receive physical balance from exchange vault along with system acknowledgement through QR code scanning.
- Handover balance to counter officials through QR code scanning.
- Reconciliation of system report with physical balance at close of operations.

The processes are further elaborated under respective headings:

i. Placement of Indent:

This menu shall be used to place indent with exchange vault for issuance. In this menu, user will have an option to select desired quantity of available notes. This menu shall include following details:

- Teller ID
- Denomination and pieces
- Value (auto-calculated by the system)

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

ii. Receipt of Indent:

This menu shall be used to acknowledge receipt of balance from exchange vault after physical verification of the balance. This shall be responding entry for originating entry by exchange vault for issuance of indent. Complete bundles shall be received through QR code scanning while incomplete bundles and chit packets will be received through manual system entry.

Populated Fields:

- Transaction ID for issuance from Exchange Vault
- Denomination and pieces (auto-fetched from system)
- Category (auto-fetched from system)

Accounting Entry:

*this accounting step shall have already been performed at the time of issuance from the Exchange Vault as mentioned in section a.II.iv of this document:

Debit	Credit
Exchange Account – Banking Box	Exchange Account – Exchange Vault

Security Level:

Since it is a responding entry/acknowledgement, therefore zero level authorization.

iii. Issuance to Head Teller

This menu shall be used to transfer balance from the Banking Box to T-24 Banking. Since these counters will not be operating in the same system, therefore the transaction executed would be transfer of liability to T-24 Banking.

This menu shall have following details: -

- Head Teller ID
- Amount
- Category(ies) – Fresh Value and Re-issue value
- Logistic Unit Number (to and from)/QR code numbers

Security Level:

Single level authorization i.e. 1 inputter and 1 authorizer.

Accounting Entry:

In CBA

Debit	Credit
Liability Account CBA	Exchange Account – Banking Box

In T-24 Banking

Debit	Credit
Head Teller Account T-24 Banking	Liability Account T-24 Banking

iv. Reconciliation

At the end of the day's operations and confirmation by counters for no more requirement, box In-Charge will carry out verification of physical balance with that of system report and close the box if balance is reconciled.

v. Returning Residual Banking Box Balance to CBA

This menu shall be used for transferring residual balances of the Banking Box (Head Teller) from T-24 Banking to CBA.

Security Level:
Single level authorization i.e. 1 inputter and 1 authorizer.

Accounting Entry:

In T-24 Banking

Debit	Credit
Liability Account T-24 Banking	Head Teller Account T-24 Banking

In CBA

Debit	Credit
Exchange Account – Banking Box	Liability Account CBA

vi. Reports

Above menu shall have reports representing total balance in box and movement of balance during the day by representing transactions carried out all day making it easy for box In-Charge to reconcile at day end. Example of reports are below:

- E-7(a) showing transfer of notes to different counters
- E-8 (details of each indent and issuance from box)

- E-4 (describes opening balance, indent to box, issuance from box, closing balance)

V. Claim Counter:

Claim counter is used to exchange defective (Mutilated, Oily, Discolored and excessively soiled) notes of public after necessary examination and passing. Claim Exchange proceeds are credited to customer account through RAAST.

Process Description:

The Claim Notes counter is involved in exchange of defective (claim) banknotes i.e. banknotes, which are mutilated, torn, oily etc. These banknotes are processed through an examination process, which involves detailed inspection and subsequent passing by respective authorities, based on prevailing instructions, and payment to customer through RAAST. Following functions are performed by this counter:

- Receipt of defective banknotes from public with duly filled application form.
- Inputting of customer details, banknotes denominations, value and defects thereof in the system.
- Transfer of cases (containing defective notes) to/from Double Locked Box (The entity used to store defective notes physically and in the system).
- Transfer of cases to Examination for decision/passing.
- Passing/Rejection of notes by Passing Authorities on case-basis.
- Transfer of passed/rejected/undecided cases to Double Locked Box.
- Transfer of passed cases to claim counter official for payment.
- Payment of passed cases (only passed notes, if the case also has rejected notes) to customer accounts through RAAST as per IBAN provided by him. IBAN inputted in the system at the first step of this list.
- Transfer of rejected notes to CO Custody.
- Re-processing of rejected cases/banknotes in the event of appeal.
- Destruction of rejected cases/banknotes.
- Transfer of counterfeit notes to Counterfeit Notes Processing.
- Transfer/receipt of doubtful notes/cases to/from PSPC

i. Receiving of Balance:

This menu will be used to place indent with exchange box to receive cash balance. System based acknowledgement will be provided to In-Charge box balance after receipt and verification of balance.

ii. Receipt of Claim Notes

This menu shall be used for receipt of defective notes from customers over the counter. Counter official will verify condition of the notes surrendered and contents of the application form. This menu will be used to enter following information:

- Amount (auto-calculated by the system)
- Claim date (auto-populated by the system based on system date)
- Claim No. (auto-populated by the system based on system sequence)

- Notes Category (selected by user from drop down)
- Name of applicant
- Address
- IBAN
- CNIC Number
- CNIC Expiry date
- Contact Number
- Bank Name (Drop down list)
- Denomination and pieces (list of denomination of all notes; to be entered as per received case)
- Case sheet including denomination, decision, passing authority and reason for passing/rejecting. This tab will be used when case is transferred for decision by passing authority.
- Condition of Notes (selection of multiple items based on defects in the notes)

After executing above entry, a system serial number will be generated against the case. This system serial number will be used moving forward for processing of the case. System should have the capacity to fetch all information related to system serial number whenever used in the system.

Security Level:

This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Receive Claim Note from public	
Debit	**Credit**
Teller	Suspense Account – Claim Notes

iii. Claim Notes Cases inputted by Commercial Banks

Using this transaction, the system user shall be able to retrieve claim note case inputted by commercial bank user via unique case ID generated by the system.

From there on the case shall be processed using subsequent modules/transactions. Once the unique system ID for the case is inputted, system shall retrieve all relevant data concerning the case from the system and allow user to change following fields depending on the outcome:

- Condition of notes
- Decision on notes
- Address/Name/IBAN/CNIC correction – with Level 2 authorization

The case shall then be transferred to the Double Lock box.

Security Level:

This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer.

iv. Receipt of Claim Note Consignments from Commercial Banks

This transaction shall only be used to mark acknowledgement of receipt of claim note consignments received from commercial banks. This shall serve as a responding entry to the originating entry created by dispatching commercial bank. System shall automatically acknowledge once all the logistic units in a consignment have been scanned.

Accounting Entry:

Receive Claim Note from commercial banks	
Debit	**Credit**
Teller	Suspense Account – Claim Notes

v. Transfer of Notes:

This menu shall have following sub menus to be used for following functions. System Serial number will be used to fetch all information of the case:

- Transfer claim cases to double lock.
- Transfer claim cases from double lock to examination.
- Transfer undecided/unpaid case to double lock.
- Transfer rejected cases to double lock.
- Transfer from rejected notes to double lock for appeal cases.
- Transfer/Receive doubtful notes to PSPC for examination.
- Transfer counterfeit notes to counterfeit notes processing.

Security Level:

This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer.

Transfer to/from Double Lock	
Debit	**Credit**
Double Lock – Undecided/Passed/Rejected Claim Notes	Teller
Teller	Double Lock – Undecided/Passed/Rejected Claim Notes

vi. Examination/Decision:

This menu shall be used to capture details of decision for passing/rejecting a specific case. The cases shall be forwarded by concerned Teller to respective Passing Authorities in the system. Each Passing Authority shall record his decision against each note (whether Passed/Rejected) and after decision revert back to Teller. The teller shall then forward to second Passing Authority and case shall revert back to Teller after decision. System serial number will fetch all the information including Case Sheet tab and display the following information for the case against each note. Counter official may be enabled to update comments field in the Case sheet but no other field:

- Denomination

- Passing Authority
- Decision
- Reason
- Comments

After the decision, transfer menu as detailed in above heading will be used.

Security Level:
This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer as per passing authorities defined in claim note processing circular.

Accounting Entry:

Decision on Claim Notes	
Passed	
Debit	**Credit**
Double Lock - Passed Claim Notes	Teller
Rejected	
Debit	**Credit**
Double Lock - Rejected Claim Notes	Teller

vii. Payment of Passed Notes through Cash/ RAAST:

This menu shall allow counter officials to process payments against passed cases through RAAST or cash by fetching details through case system serial number. There shall be option of single or bulk uploading of passed cases through system serial number. Following details to be provided in this version:

- System Serial Number
- Account Title
- Customer IBAN
- Denomination and pieces of Passed Banknotes
- Value (auto-calculated by system)
- Customer's Bank

It may be noted that all the information in this menu shall be fetched through system serial number instead of manual inputting, as it will provide consistency of information. If a case contains both passed and rejected notes, the system shall only fetch details of the passed notes for payment purpose.

Accounting Entries:

Passed Claim Note Payment – Inventory Entry	
Debit	**Credit**
Evening Collection – Reissue/Soiled/Defective	Teller

The stock of such paid defective notes shall be transferred to the Teller, from whereon the same shall be sent to Evening Collection.

Payment of Claim Note – Financial Entry	
CBA	
Debit	**Credit**
Suspense Account – Claim Notes	Liability Account CBA
Banking	
Debit	**Credit**
Liability Account T-24 Banking	Payable Sundry - Claim Note Payment
Payable Sundry - Claim Note Payment	Customer Account – Bank Credit

Security Level:
This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer.

viii. Destruction of Rejected Claim Notes

This menu shall allow for destruction entry of rejected notes after a time specified in instructions.

Populated Fields:

- System auto-populates the transaction with system serial numbers of cases having reject defective notes against pre-determined criteria (i.e. reject notes due for destruction).
- System shall also auto-populate date of rejection and due date for destruction against each case.
- User shall execute the transaction to mark destruction of reject notes.

Security Level:
This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Suspense Account – Claim Notes	Double Lock - Rejected Claim Notes

ix. Evening Collection:

This menu shall be used to transfer defective notes and remaining cash balance after payments to evening collector. Manual system entry will be used transfer of defective notes.

Accounting Entry:

Debit	Credit
Evening Collection – Reissue/Soiled/Defective	Teller Stock Account

x. Reports:

Defective Claim Note processing menus shall be able to provide following reports:

- L-52 report of claim cases received on a date.
- L-12 showing details of rejected notes.
- E-7 report showing payment details.
- L-54 showing balance in double lock.
- E-26a showing total contents of double lock including rejected notes.
- Report showing rejected notes eligible for destruction as per defined timeline.
- Report showing customer-wise payments made in a period, including case number, customer name, CNIC, IBAN, passed denominations and pieces, date of credit.

VI. Coin Counter:

Coin counter is utilized to exchange or purchase different denomination of coins. Commemorative coins of different denomination can also be purchased through coin counter.

Process description:

The coin counter shall perform following functions:

- Receipt of coins in counted and uncounted category from Coin Box and provision of system based acknowledgement.
- Carry out shroffing of uncounted coins and their conversion into smaller bags for issuance to general public.
- Receipt of notes from general public and its examination on CNS/DNS machine.
- Issuance of coins through system entry and handed over to the customer.
- Reconciliation of teller log.
- Transfer of notes to evening collection.

The processes are further elaborated under respective headings:

i. Receipt of Coins:

This menu will be used to acknowledge receipt of coins from coins box in counted and uncounted category. Another transaction will be added in this menu, which will transfer coins after shroffing to coins' box. This menu shall include following details:

- Teller ID
- Amount (auto-calculated by system)
- Category of coins
- Denomination and pieces of coins

Security Level:

Acknowledgement by the counter official. Zero level.

ii. Receipt of Notes from Customer and Payment of Coins:

This transaction shall be used to execute system entry wherein amount received and coins paid are duly recorded together with name and CNIC details. In this transaction shall include following information:

- Customer Name
- Denomination and pieces of Notes received from customer
- CNIC of customer
- Value (auto-calculated by system)
- Denomination and pieces of coins issued to customer

Security Level:

Since exchange value from customer is received at spot in shape of notes, this menu may be kept at 0 level authorization.

Another transaction shall be added in this menu that will be used to receive coins in heavy quantity from public and banks and payment of exchange value of the same in shape of notes.

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

Accounting Entry:

Receive Indent from Box	
Debit	**Credit**
Teller Stock Account	Coin Exchange Account - Counted

Issue to public	
Debit	**Credit**
Coin Issued Account	Teller Stock Account

Cash received from public	
Debit	**Credit**
Teller Stock Account	Circulation Account

iii. Reconciliation and Transfer to Coins Box:

Once the Banking Hours/Public Dealing Hours are over, the physical Cash available with the Counter Officials is matched with the system-generated report. In case of any discrepancy, vouching and tracing of the difference is carried out to regularize the position. This at times leads to a reversal of transaction in the system that is then duly authorized by the Competent Authority after seeking proper justification for the approval.

After reconciliation, this menu shall be used to transfer remaining counted coins to Coins Box. This entry shall be originating entry, which shall be responded by Coins Box In-Charge at single level. Following details will appear in this menu:

- Box In-Charge ID
- Teller ID

- Amount (auto-calculated by system)
- Category of coins
- Denomination and pieces of coins

Security Level:
Single level authorization i.e. 1 inputter and 1 authorizer.

Accounting Entry:

Debit	Credit
Coin Exchange Account – Counted	Teller Stock Account

iv. Evening Collection:

This menu shall be used to transfer soiled and reissue notes to evening collector. QR code scanning will be used for bundles of reissue notes while manual system entry will be used for incomplete bundles and chit packets. Soiled notes will be packed into cash trays in loose form with system generated QR code.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

Accounting Entry:

Debit	Credit
Evening Collection – Reissue/Soiled/Defective	Teller Stock Account

v. Reports:

Following reports will be required to be attached with coin counter operations menu:

- E-16 (Payments)
- E-16 (Receipt)
- E-18
- E-11
- E-12 (register of coins issued to teller)

VII. Exchange Counter:

Exchange counter is utilized to exchange different denomination of banknotes with other. Exchange of Banknotes will be sorted at day end as “Reissue” and “Soiled” which will subsequently be transferred to evening collection.

Process Description: -
The exchange counter shall perform following functions:

- Receipt of fresh and reissue notes from exchange box and provision of system based acknowledgement.

- Receipt of notes from general public and its examination on CNS/DNS machine.
- Issuance of fresh/reissue notes through system entry and handed over to the customer.
- Reconciliation of teller log.
- Transfer of notes to evening collection.

The processes are further elaborated under respective headings:

i. Receipt of Fresh/Reissue Notes:

This menu will be used to acknowledge receipt of fresh/reissue notes from exchange box by verifying QR codes and manual entry for chit packets. This menu shall include following details:

- Teller ID
- Amount (auto-calculated by system)
- Category of Notes (auto-retrieved by system)
- Denomination and Pieces of Notes
- QR Code Reference

This menu can be used on multiple times during the day in order to issue notes to exchange counters through exchange box on throughout the day.

Security Level:

Acknowledgement by the counter official. Zero level.

Accounting Entry:

Debit	Credit
Teller Stock Account	Exchange Account – Box Balance

ii. Receipt of Notes from Customer and Payment of Exchange Value:

This transaction shall be used to execute system entry wherein amount received and paid are duly recorded together with name and CNIC details. In this transaction shall include following information:

- Customer Name
- Customer CNIC
- Denomination and pieces received from Customer
- Amount Received (auto-calculated by system)
- Denomination and pieces issued to Customer
- Amount Issued (auto-calculated by system)
- Purpose of Issuance (through Drop Down Menu)

Under this menu, two other inputs may be added in order to record CNIC of customers and PIN of employees for issuance of monthly quota, Eid Quota or any other time to time issuance.

Furthermore, this menu shall allow recording of **Misprint Notes** received from general public. This transaction shall have following information:

- Customer Name
- Customer CNIC
- Denomination and pieces received from Customer
- Series and serial number of notes received from Customer
- Amount Received (auto-calculated by system)
- Denomination and pieces issued to Customer
- Amount Issued (auto-calculated by system)
- Purpose of Issuance (through Drop Down Menu)

Security Level:
Since exchange value from customer is received at spot in shape of notes, this menu may be kept at 0 level authorization.

Accounting Entry:

Receive Notes	
Debit	**Credit**
Teller Stock Account	Circulation Account

Pay Notes	
Debit	**Credit**
Circulation Account	Teller Stock Account

iii. Evening Collection

This menu shall be used to transfer soiled and reissue notes to evening collector. QR code scanning will be used for bundles of reissue notes while manual system entry will be used for incomplete bundles and chit packets. Soiled notes will be packed into cash trays in loose form with system generated QR code.

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

Accounting Entry:

Debit	**Credit**
Evening Collection – Reissue/Soiled/Defective/Misprint	Teller Stock Account

iv. Reports:

Following reports will be required to be attached with Exchange counter operations menu:

- E-11
- E-07 (payment)

- E-07 (receipt)
- E-18 (transfer to evening collection)
- Indent Position
- CNIC Fresh Notes Issuance
- Employee PIN Issuance
- I-9(a) showing details of misprint notes for a specified date

VIII. Counterfeit Notes Processing:

This process shall be used to process counterfeit notes received from external and internal stakeholders including banks, LEAs, cash counters etc.

Process description:

The Counterfeit Notes menu shall be used for handling/storage/processing of Counterfeit Notes. It shall perform following functions:

- Receipt of counterfeit notes over the counter from commercial banks/public/Law Enforcing Agencies (LEAs).
- Receipt of counterfeit notes from examination halls/Claim Notes Counter.
- Bulk inputting of counterfeit notes through Countertop Note Sorting (CNS) machine linked with system.
- Transfer to/from CO Custody.
- Transfer to PSPC/ CMH/ other internal stakeholder for verification/presentation/testing etc. and receive back.
- Return to LEAs for custody during legal proceedings/investigation.
- Receive back from LEAs upon conclusion of legal proceedings/investigation.
- Uploading PSPC Forensic Analysis Report in system.
- Destruction of Counterfeit Notes.

i. Receipt of Counterfeit Notes:

This menu will be used to place record receipt of counterfeit notes from multiple stakeholders such as banks, examination halls, general public, LEAs and Cash Counters. This menu will allow manual inputting as well as CSV upload option for bulk upload. Following fields will be required in this menu:

- Submitting Entity (Public/Commercial Bank/LEAs/Examination Hall – Selection through radio buttons) – this selection will determine the subsequent input fields required to be filled
- **Public**
  - Name of Individual
  - CNIC of Individual
  - Address of Individual
  - District
  - Series, Serial Number, Denomination of counterfeits (csv/xml upload, along with option for manual inputting)
  - Detected at Counter

- Reason for counterfeit (selection of multiple compromised features from list of overall banknotes features)

- **Commercial Bank**
  - Name of Bank
  - Name and CNIC of Bank Representative
  - District
  - Series, Serial Number, Denomination of counterfeits (csv/xml upload, along with option for manual inputting)
  - Reason for counterfeit (selection of multiple compromised features from list of overall banknotes features)
- **LEAs**
  - FIR number/Case Number
  - LEA Name
  - District
  - Series, Serial Number, Denomination of counterfeits (csv/xml upload, along with option for manual inputting)
  - Reason for counterfeit (selection of multiple compromised features from list of overall banknotes features)
- **Examination Hall**
  - Detected in Examination Hall (drop down of active halls)
  - Detected in Balance (drop down selection list of commercial banks, Evening Collection etc.)
  - Series, Serial Number, Denomination of counterfeits (csv/xml upload, along with option for manual inputting)
  - Reason for counterfeit (selection of multiple compromised features from list of overall banknotes features)
- **Claim Note Process**
  - Counterfeits detected during claim note processing shall be transferred to the counterfeit notes module for onward processing.

For counterfeit notes received from cash counters and examination halls, this transaction will be used to respond to entry originated by cash counter for transfer of counterfeit note.

Security Level:
This transaction will have zero level authorization.

ii. Transfer to CO Custody:

After examination by Cash Unit, CMU official will transfer examined notes to CO Custody using this menu. If a note is found genuine during the examination, it will be updated in original capture entry and returned to relevant stakeholder.
Security Level:
This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Counterfeit Notes Suspense Account – CO Custody	Counterfeit Note Impound Account

iii. Movement from CO Custody:

This menu will have multiple inputs, which shall allow following functionalities:

- Transfer and receive back Counterfeit Notes to Police
- Transfer and receive back Counterfeit Notes for sampling/training
- Transfer (Originating entry for consignment) and receive back (Responding Entry for consignment from PSPC) Counterfeit Notes from PSPC
- Upload PSPC Forensic Analysis Report in System

Security Level:

This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Transfer Forged Notes to Police/sampling/training	
Debit	**Credit**
Counterfeit Note Impound Account	Counterfeit Notes Suspense Account – CO Custody

Receive Back Forged Notes from Police/sampling/training	
Debit	**Credit**
Counterfeit Notes Suspense Account – CO Custody	Counterfeit Note Impound Account

Transfer Forged Notes to PSPC	
Debit	**Credit**
Counterfeit Notes Suspense Account – PSPC	Counterfeit Notes Suspense Account – CO Custody

Receive Forged Notes from PSPC	
Debit	**Credit**
Counterfeit Notes Suspense Account – CO Custody	Counterfeit Notes Suspense Account – PSPC

iv. Uploading Forensic Analysis:

This transaction shall be used by the office for uploading the Forensic Analysis report generated by PSPC. Details in the matter shall be provided at a later stage.

v. Destruction:

This menu shall allow counter officials mark counterfeit notes, held in CO custody, for destruction after lapse of specified time period as allowed by instructions. Furthermore, this menu shall have a transaction to pass destruction entry of notes eligible for destruction after physical destruction has been carried out.

Security Level:
This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Counterfeit Notes Suspense Account – Destruction	Counterfeit Notes Suspense Account – CO Custody

vi. Reports:

Defective Claim Note processing menus shall be able to provide following reports:

- Counterfeit Note Case Details.
- Counterfeit Notes Based Report.

IX. Heavy Tender Counter and Examination Hall

This counter is involved in receipt of bulk balances from public, government bodies (such as National Savings) and processes the same via CNS/DNS machines. Consequent to examination, discrepancies are adjusted and corrected & examined balances are transferred to concerned counter for exchange/deposit etc.

Process Description:

The Heavy Tender Counter and Examination Hall shall perform following functions:

- Receive bulk banknotes from public/government bodies at Heavy Tender Counter for exchange/deposit.
- Transfer balances from Counter to Heavy Tender Hall for Examination.
- Examination of balances in HT Hall using CNS/DNS machines linked with the system.
- Transfer back examined balances to HT Counter along with discrepancies, in system.
- Adjustment of shortage/Excess by HT Counter.
- Transfer examined and processed balances to Evening Collection.

The processes are further elaborated under respective headings:

i. Heavy Tender Counter

The Heavy Tender Counter officials for performing following activities/transactions shall use this menu:

- Receive banknotes in bulk from public/government bodies.
- Transfer the banknotes to HT Hall for examination
- Receive back processed banknotes from HT Hall along with details of discrepancies
- Transfer examined balances to respective counter for deposit/exchange etc. OR exchange examined banknotes and issue fresh/reissue to respective customer
- Transfer examined balances to Evening Collection.

Input Fields:

- Public/Government Entity (single selection)

- Customer/Entity name
- Representative name (in case of government entity)
- Customer/representative CNIC
- Denomination and pieces of notes received from customer
- Heavy Tender Hall number (for transferring balance for examination)
- Denomination and pieces of notes issued to customer (after examination by HT Hall)
- Denomination and pieces of notes transferred to HT Hall (for examination)
- Denomination and pieces of notes received from HT Hall (after examination by HT Hall)
- Discrepancies with description of discrepancy from drop down menu such as defective/shortage/excess/counterfeit etc.
- Credit Government Account

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
In-Charge Heavy Tender Hall (Teller Stock Account)	Liability Account CBA

ii. Heavy Tender Examination Hall

This menu shall be used by the Heavy Tender Hall In-Charge for performing following activities:

- Receive banknotes from HT Counter for examination by Hall In-Charge.
- Transfer banknotes to Examiners for Examination.
- Examination of banknotes on CNS/DNS machined linked with the system.
- Generation of QR codes for processed bundles.
- Receive back examined balances from Examiners by Hall In-Charge along with details of discrepancies, in system.
- Transfer processed balance to HT Counter along with details of discrepancies in system.

Input Fields:

- Transaction reference number of HT Counter
- Denomination and pieces of notes received from customer (auto-retrieved by system)
- Heavy Tender Hall number (for transferring balance for examination)
- Discrepancies with description of discrepancy from drop down menu such as defective/shortage/excess/counterfeit etc.
- Denomination and pieces of notes returned to HT Counter (after examination by HT Hall)

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

Accounting Entry:

Receive from HT Hall In-Charge – Inventory Transaction	
Debit	**Credit**
Examiner Account (Teller Stock Account)	In-Charge Heavy Tender Hall (Teller Stock Account)

Transfer Examined Balance to HT Hall In-Charge – Inventory Transaction	
Debit	**Credit**
In-Charge Heavy Tender Hall (Teller Stock Account)	Examiner Account (Teller Stock Account)

Debit	**Credit**
Evening Collection	In-Charge Heavy Tender Hall (Teller Stock Account)

In T-24 Banking

Payment through RAAST – Financial Transaction (only in case of transfer through credit – Government Account	
Debit	**Credit**
Liability Account T-24 Banking	Government Account

Payment through RAAST – Financial Transaction (only in case of transfer through credit – Commercial Bank	
Debit	**Credit**
Liability Account T-24 Banking	Commercial Bank

Payment through RAAST – Financial Transaction (only in case of transfer through credit - Customer	
Debit	**Credit**
Liability Account T-24 Banking	Customer Bank Account through RAAST

Entry to appear as unauthorized in T-24 Banking and to be authorized by concerned Govt. Receipts counter official.

Reports to be added:
1. E-6 (Distribution, Collection)

2. E-61 (Detail of deficiencies)

X. Evening Collection:

The residual balances of counters are deposited at evening collection after closing of counters. An officer is posted as in charge evening collection who receives the balances from all counter officials and then deposits the same to the vault.

Process Description:

The evening collection shall perform following functions:

- Receipt of soiled, defective and reissue notes from counters.
- Processing of notes through DNS machine, making bundles and packets.
- Transfer of physical notes to vault through system entry.
- Acknowledgement of entry by vault officials

The processes are further elaborated under respective headings:

i. Receipt of Evening Collection from Banking

At the end of day's operations in the T-24 Banking, the tellers shall transfer their remaining balances to Head Teller. Thereafter, the head teller shall transfer the amount to CBA, value segregated on the basis of category i.e. soiled value, re-issue value and fresh value. The transaction shall originate from T-24 Banking and settle in CBA.:

Accounting Entry:

T-24 Banking	
Debit	**Credit**
Liability Account T-24 Banking	Head Teller - T24 Banking

CBA	
Debit	**Credit**
Head Teller - CBA	Liability Account CBA

Subsequently, user in CBA shall update denominations and categories of the value received as per actual quantities.

Security Level:

The transactions shall have Level 0 Authorization i.e. 1 inputter

ii. Receipt of Soiled Balance:

This menu will be used to acknowledge receipt of soiled balance from counter officials/Head Teller in trays through QR code scanning. Evening collector will receive soiled notes in loose form from counter officials, process them via DNS and make bundles. Once physical verification has been done, it will be acknowledged in system. This process will be repeated for all relevant counters. At this point, system

shall match the scanned QR codes against those included in the consignment by counter officials to carry out automated reconciliation. In case reconciliation is not achieved, system shall allow user(s) to carry out examination of balance in order to determine discrepancies. This menu shall include following details:

- Teller ID
- Denomination and Pieces
- Category of banknotes
- Total Value (auto-calculated by the system)
- QR Code Reference

Security Level:

Acknowledgement by the evening collector against originating entry. Zero level.

Accounting Entry:

Debit	Credit
Evening Collection - Soiled	Head Teller/Teller Stock Account

iii. Receipt of Reissue Balance:

This menu will be used to acknowledge receipt of reissue balance from counter officials in bundles through QR code scanning and in packets and chit packets through manual system entry. Once physical verification has been done, it will be acknowledged in system for each counter. This process will be repeated for all relevant counters. Evening collector will process chit packets and incomplete bundles to make bundles of the same and generate QR codes for newly created bundles. At this point, system shall match the scanned QR codes against those included in the consignment by the counter official to carry out automated reconciliation. In case reconciliation is not achieved, system shall allow user(s) to carry out examination of balance in order to determine discrepancies. This menu shall include following details:

- Teller ID
- Denomination and Pieces
- Category of banknotes
- Total Value (auto-calculated by the system)
- QR Code Reference

Security Level:

Acknowledgement by the evening collector against originating entry. Zero level.

Accounting Entry:

Debit	Credit
Evening Collection – Reissue	Head Teller/Teller Stock Account

iv. Receipt of Defective Balance:

This menu shall be used to acknowledge receipt of defective notes from claim counter. Manual system entry will be used transfer of defective notes. This menu shall include following details:

- Teller ID
- Denomination and Pieces
- Category of banknotes
- Total Value (auto-calculated by the system)

Security Level:
Acknowledgement by the evening collector against originating entry. Zero level.

Accounting Entry:

Debit	Credit
Evening Collection – Defective/Misprint	Head Teller/Teller Stock Account

v. Transfer to Cancelled/Exchange Notes Vault:

This menu shall be used to transfer evening collection to respective vaults. Soiled and defective notes will be transferred to Cancelled Notes Vault while reissue notes will be transferred to Exchange Notes. QR code scanning will be used for bundles while manual system entry will be used for incomplete bundles and chit packets. Three different inputs for three categories will be created with following details:

- Teller ID
- Denomination and Pieces
- Category of banknotes
- Total Value (auto-calculated by the system)
- Destination Vault (Cancelled/Exchange)
- QR Code Reference

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

Accounting Entry:

For Transfer to Exchange Vault	
Debit	**Credit**
Exchange Account-Exchange Vault	Evening Collection – Reissue

For Transfer to Cancelled Notes Vault	
Debit	**Credit**

Cancelled Notes Vault Account-Defective/Soiled/Misprint	Evening Collection – Defective/Soiled

vi. Reports:

Following reports will be required to be attached with coin counter operations menu:

- Evening Balances Position
- I-10
- E-18 (Evening Collection)

c. Examination Halls and Destruction

I. Balance Preparation Hall (Optional)

The purpose of this hall is to receive banknotes from various vaults (Bonded, Chest, and Cancelled Notes Vaults), carry out preparation of the same, generate new QR codes for prepared & sealed cash trays and return the same to originating vault. This transaction shall be optional and shall only be used in case the balances are not already pre-pared by the banks.

a. Process Description:

The Balance Preparation Hall shall perform following functions:

- Receive banknotes from Bonded, Chest and Cancelled Notes Vaults for preparation.
- Transfer received balance to commercial bank/Chest representatives or SBP BSC official(s) for preparation.
- Receive back prepared balances from commercial bank/Chest representatives or SBP BSC official(s).
- Generate QR codes for prepared trays and input seal numbers of trays in system.
- Return prepared trays to originating vault through QR code scanning.

The processes are further elaborated under respective headings:

i. Receive Banknotes

This menu shall be used for receipt of banknotes from Bonded, Chest and Cancelled Notes Vaults for preparation.

For this purpose, the originating vault shall generate the originating entry in the system. Upon receipt of banknotes at balance preparation hall, user(s) shall:

Scan QR codes of the Logistic Units received whereupon entire data of the contents of Logistic Units shall be retrieved by the system and captured.

At this point, system shall match the scanned QR codes against originating system entry to carry out automated reconciliation. The entry carried out by the Balance Preparation Hall user(s) shall therefore be a responding entry.

Security Level:

The transactions shall have Level 0 Authorization i.e. 1 inputter.

Accounting Entry:

Debit	Credit
Suspense Account – Preparation Hall	• Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name • Chest Notes Vault Account (Invoice Account) – Chest Name • Cancelled Note Vault Account

ii. Transfer for Preparation

This menu shall be used for transferring the balance to commercial bank/ Chest representatives or BSC official(s) (posted in the hall) in the system. User(s) shall be able to manually input the number of trays/quantum of banknotes transferred to each individual in the Balance Preparation Hall.

Input Fields:

- Original Transaction reference used for transfer from Vault to Hall
- Commercial Bank/ Chest Name
- Commercial Bank/ Chest Name Representative Name
- Commercial Bank/ Chest Name Representative ID
- Denomination and pieces/ number of trays (in this case, system shall auto-fetch the data pertaining to trays upon QR code scanning/inputting in the field including seal numbers)
- Amount (auto-calculated by the system)

Security Level:
The transactions shall have Level 0 Authorization i.e. 1 inputter.

Accounting Entry:

Debit	Credit
Examiner Suspense Account	Suspense Account – Preparation Hall

iii. Receive Prepared Balance

This menu shall be used for receiving back prepared balance from commercial bank/ Chest representatives or BSC Official(s) (posted in the vault) in the system. There shall be system controls to ensure that the quantity, denomination & value of balance being received back is the same as originally transferred to the preparing individuals.

Input Fields:

- Original Transaction reference used for transfer from Vault to Hall
- Commercial Bank/ Chest Name
- Commercial Bank/ Chest Name Representative Name
- Commercial Bank/ Chest Name Representative ID
- Denomination and pieces/ number of trays prepared (in this case, system shall auto-fetch the data pertaining to trays upon QR code scanning/inputting in the field including seal numbers)
- Amount (auto-calculated by the system)
- Discrepancies including counterfeits/shortages/excess

Security Level:
The transactions shall have Level 0 Authorization i.e. 1 inputter.

Accounting Entry:

Debit	Credit
Suspense Account – Preparation Hall	Examiner Suspense Account

iv. QR code generation & inputting of seal numbers (optional)

Upon receiving prepared and sealed cash trays from preparing individuals, the Balance Preparation Hall In-Charge(s) shall generate QR codes for the trays and input new seal numbers in the system

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

v. Return Prepared Balance

This menu shall be used for returning duly prepared & sealed cash trays to originating vault through QR code scanning. The entry generated at this stage shall be an Originating Entry, which shall be responded to by the receiving vault.

Input Fields:

- Hall In-Charge ID
- Original Transaction reference used for transfer from Vault to Hall
- Number of trays (based on system generated QR codes along with seal numbers)
- Denominations and pieces (auto-fetched based on QR codes scanned)
- Discrepancies including counterfeits/shortages/excess
- Amount (auto-calculated by the system)
- Transaction ID used for transfer from Vault to Hall

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

Accounting Entry:

Debit	Credit
• Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name • Chest Notes Vault Account (Invoice Account) – Chest Name • Cancelled Note Vault Account	Suspense Account – Preparation Hall

vi. Penalties

This menu shall be used for recording of BPI/CMS related penalties, if any.

Any penalties levied by the Balance Preparation Hall In-Charge(s) shall be duly authorized by CMU official. Consequently, the concerned commercial bank shall be debited by the amount of penalty.

Input Fields:

- Bank Name – Current Account of Bank fetched by system
- Penalty number and description (selected from drop down) – can select multiple penalties
- Instance per penalty
- Date of penalty
- Reason for penalty – description field
- Total penalty amount (calculated based on total penalties selected)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter 1 authorizer only. However, authorization to be done by CMU user

Accounting Entry:

Financial Transaction	
Debit	**Credit**
Commercial Bank Current Account	CMS (PL 61321)

II. BPAS Examination Hall

The BPAS Examination hall shall be used for processing of banknotes received from vaults and commercial banks (through direct days' receipt). At the end of the processing, the issuable notes shall be deposited in Exchange Vault whereas the non-issuable notes shall be shredded online or preserved, per user's discretion.

Process Description:

The BPAS Examination Hall shall perform following functions:

- Receive banknotes from Bonded, Chest, Cancelled Notes Vaults and Commercial Banks (through Day's Receipt) for examination and destruction.
- Link BPAS Machine with the system through direct/.XML integration.
- Transfer received balance to BPAS Machine(s) for examination.
- Receive back processed issuable/preserved banknotes from BPAS Machine(s).
- Receive back unprocessed/reject balance from BPAS Machine(s)
- Generate QR codes for trays containing processed undestroyed balance and input seal numbers of trays in system.
- Transfer trays of processed balance to Exchange Vault and/or Cancelled Notes Vault.
- Transfer machine unprocessable banknotes to Originating Vault.
- Transfer machine reject banknotes to CO Representative for Destruction
- Carry out online shredding of non-issuable balances
- Access activity log of BPAS Machine for reconciliation at end of operations.

The processes are further elaborated under respective headings:

i. Receive Banknotes

This menu shall be used for receipt of banknotes from Bonded, Chest, Cancelled Notes Vaults and Commercial Banks (through direct Day's Receipt) for examination. In case of direct receipt from commercial bank, the BPAS Hall user shall credit the respective commercial bank.

For this purpose, the originating vault shall generate the originating entry in the system. Upon receipt of banknotes at BPAS Examination hall, user(s) shall:

Scan QR codes of the Logistic Units received whereupon entire data of the contents of Logistic Units shall be retrieved by the system and captured. At this point, system shall match the scanned QR codes against originating system entry to carry out automated reconciliation. The entry carried out by the BPAS Hall user(s) shall therefore be a responding entry.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit

Suspense Account – BPAS Examination Hall	• Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name • Chest Notes Vault Account (Invoice Account) – Chest Name • Cancelled Note Vault Account

ii. Transfer to BPAS

This transaction shall be used for transferring the banknotes to BPAS machine(s) for examination. User(s) shall be able to manually input the number of trays/quantum of banknotes transferred to BPAS machine(s) in the system. Each BPAS Machine shall be identifiable in system through a unique system ID.

Input Fields:

- Number of trays (auto-calculated based on QR codes of trays scanned or manually inputted)
- Denomination and pieces (auto-calculated by the system)
- Machine ID
- Transaction ID used for transfer from Vault to Examination Hall

Security Level:
The transactions shall have Level 0 Authorization i.e. 1 inputter.

Accounting Entry:

Debit	Credit
BPAS Machine ID	Suspense Account – BPAS Examination Hall

iii. BPAS Activity

This menu shall record the BPAS activities such as processing, rejection, online shredding as it is linked directly to the system. In addition, it shall also apprise regarding the mode being used, treatment of non-issuable balance. The BPAS machine shall prepare an XML file upon completion of batch which shall be posted to a shared file server. The system shall automatically fetch the batch file from shared file server and update processing data.

iv. QR code generation

Consequent to processing on BPAS, system shall automatically generate QR codes for processed & packed bundles. Similarly, the system shall also automatically generate QR codes for the cash trays (optional) based on fix number of bundles in

each tray. For the purpose, the QR codes of bundles shall be linked with QR codes of corresponding cash trays.

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

v. Receive Banknotes from BPAS

Consequent to generation of QR codes for bundles and cash trays (optional), the balance shall be returned to the BPAS Hall User(s).

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

Accounting Entry:

Fit/Unfit Notes not destroyed	
Debit	**Credit**
Suspense Account – BPAS Examination Hall - Examined	BPAS Machine ID

Machine Rejected Banknotes not destroyed	
Debit	**Credit**
Suspense Account – BPAS Examination Hall – Machine Reject	BPAS Machine ID

Online Shredded Balance	
Debit	**Credit**
Suspense Account – BPAS Examination Hall - Destroyed	BPAS Machine ID

vi. Transfer Banknotes

This menu shall be used for transferring processed/unprocessed banknotes for further action. User(s) shall be able to transfer:

- Processed/packed balances to Exchange Vault.
- Unprocessed balances back to Originating Vault
- Machine reject banknotes to CO Representative for offline destruction.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Transfer to Exchange Vault

Debit	Credit
Exchange Notes Vault Account - Exchange Account	Suspense Account – BPAS Examination Hall - Examined

Transfer to Cancelled Notes Vault	
Debit	**Credit**
Cancelled Notes Vault Account	Suspense Account – BPAS Examination Hall - Examined

Transfer BPAS Rejection to Destruction Team	
Debit	**Credit**
Suspense Account – Destruction Team	Suspense Account – BPAS Examination Hall – Machine Reject

vii. Destruction of BPAS Rejected Banknotes

This transaction shall enable the destruction team to mark destruction of BPAS rejected banknotes transferred to them.

Security Level:

The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Transfer to Exchange Vault	
Debit	**Credit**
Suspense Account – Destroyed	Suspense Account – Destruction Team

viii. Adjustment of Discrepancies

This menu shall be used for adjustment of discrepancies encountered in the processed balance such as:

- Shortages/Excess
- Defective banknotes
- Counterfeit banknotes

Discrepancies as highlighted above, along with penalties shall be debited from concerned commercial bank.

Security Level:

The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Financial Transaction	
Debit	**Credit**

Commercial Bank Current Account	SBP BSC Deposit Account

ix. Penalty Recording

This menu shall be used for recording of BPI/CMS related penalties, if any.

Any penalties levied by the BPAS Examination Hall In-Charge(s) shall be duly authorized by CMU official. Consequently, the concerned commercial bank shall be debited by the amount of penalty.

Input Fields:

- Bank Name – Current Account of Bank fetched by system
- Penalty number and description (selected from drop down) – can select multiple penalties
- Instance per penalty
- Date of penalty
- Reason for penalty – description field
- Total penalty amount (calculated based on total penalties selected)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter 1 authorizer only. However, authorization to be done by CMU user

Accounting Entry:

Financial Transaction	
Debit	**Credit**
Commercial Bank Current Account	CMS (PL 61321)

x. BPAS Machine log - Linkup to system

This report shall provide statistical data and performance data of each BPAS Machine.

Reports to be added.

- E-6 (Collection, Distribution & Summary)
- E-13
- E-61
- CNV-9

III. DNS Examination Hall

The DNS Examination hall shall be used for processing of banknotes received from vaults and commercial banks (through direct days' receipt). At the end of the processing, the

issuable notes shall be deposited in Exchange Vault whereas the non-issuable notes shall be shredded online or preserved, per user's discretion.

a. Process Description:

The DNS Examination Hall shall perform following functions:

- Receive banknotes from Bonded, Chest, Cancelled Notes Vaults and Commercial Banks (through Day's Receipt) for examination and destruction.
- Link DNS Machine with the system through upload mechanism.
- Transfer received balance to Examiners for examination.
- Generation of QR codes for processed reissue banknotes, bundles and cash trays.
- Receive back processed reissue (QR-coded) & non-issuable banknotes from Examiners.
- Transfer trays of reissue balance to Exchange Vault through QR code scanning.
- Transfer machine unprocessable banknotes to Originating Vault.
- Transfer non-issuable balance to Destruction team.
- Access activity log of DNS Machines for gauging machine utilization.

The processes are further elaborated under respective headings:

i. Receive Banknotes

This menu shall be used for receipt of banknotes from Bonded, Chest, Cancelled Notes Vaults and Commercial Banks (through direct Day's Receipt) for examination. In case of direct receipt from commercial bank, the DNS Hall user shall credit the respective commercial bank.

For this purpose, the originating vault shall generate the originating entry in the system. Upon receipt of banknotes at DNS Examination hall, user(s) shall:

Scan QR codes of the Logistic Units received whereupon entire data of the contents of Logistic Units shall be retrieved by the system and captured.

At this point, system shall match the scanned QR codes against originating system entry to carry out automated reconciliation. The entry carried out by the DNS Hall user(s) shall therefore be a responding entry.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Suspense Account – DNS Examination Hall	• Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name

	• Chest Notes Vault Account (Invoice Account) – Chest Name • Cancelled Note Vault Account

ii. Percentage Assignment

This transaction shall be used for setting the percentage of banknotes to be examined on sample basis. The percentage set at this stage shall determine the overall shortage in the total balance based on shortages in the sample examined portion.

Input Fields:

- Transaction ID(s) through which balance transferred to Examination Hall
- Input percentage of relaxed portion of balance
- Hall number
- Hall In-Charge ID

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

iii. Transfer to Examiners

This transaction shall be used for transferring the banknotes to Examiners for examination. User(s) shall be able to manually input the number of trays/quantum of banknotes transferred to each Examiner in the system. Each Examiner shall be identifiable in system through a unique system ID.

Input Fields:

- Examiner ID
- Transaction ID(s) through which balance transferred to Examination Hall
- Number of Cash Trays/Bundles (auto-fetched by system based on scanned QR codes or manually inputted by user)
- Denomination and pieces (auto-fetched from system or manually inputted)

Upon execution of transaction, respective Examiners shall receive a pop-up in the system and via email. The balance transferred to the examiner shall also appear in his user menu.
The respective Examiners shall accordingly acknowledge receipt in system.

Security Level:
The transactions shall have Level 0 Authorization i.e. 1 inputter.

Accounting Entry:

Debit	Credit

Examiner (Teller Stock Account)	Suspense Account – DNS Examination Hall

iv. QR code generation

Consequent to processing, Examiners generate QR codes for processed reissue bundles. Similarly, the Examiners shall also generate QR codes for the cash trays based on fix number of reissue bundles in each tray. For the purpose, the QR codes of bundles shall be linked with QR codes of corresponding cash trays. No QR codes shall be generated for processed soiled bundles/ trays.

However, system shall also allow the Hall In-Charge(s) to generate QR codes for bundles and trays, if required

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

v. Receive Banknotes from Examiners

Consequent to processing, DNS Hall user shall receive the processed reissue and non-issuable balances from respective Examiners. There shall be system controls to ensure that the quantity, denomination & value of balance being received back is the same as originally transferred to the Examiners.

Input Fields:

- Examiner ID
- Transaction ID(s) through which balance transferred to Examination Hall
- Denomination and pieces examined
- Discrepancies including counterfeits/shortages/excess
- Amount (auto-calculated by the system)

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

Accounting Entry:

Debit	Credit
Suspense Account – DNS Examination Hall	Examiner (Teller Stock Account)

vi. Transfer Banknotes

This menu shall be used for transferring processed/unprocessed banknotes for further action. User(s) shall be able to transfer:

- Processed reissue balances to Exchange Vault through QR code scanning.
- Unprocessed balances back to Originating Vault through QR code scanning
- Processed non-issuable balances to Destruction Team.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Exchange Notes Vault Account - Exchange Account	Suspense Account – DNS Examination Hall - Examined
Debit	**Credit**
Cancelled Notes Vault Account	Suspense Account – DNS Examination Hall - Examined

Debit	Credit
Suspense Account – Destruction Team	Suspense Account – DNS Examination Hall - Examined

vii. Adjustment of Discrepancies

This menu shall be used for adjustment of discrepancies encountered in the processed balance such as:

- Shortages with percentage adjustment
- Defective banknotes
- Counterfeit banknotes
- Excess as per actual

Discrepancies as highlighted above, along with penalties shall be debited from concerned commercial bank.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Financial Transaction	
Debit	**Credit**
Commercial Bank Current Account	SBP BSC Deposit Account

Financial Transaction (in case of excess)	
Debit	**Credit**
Cash	Commercial Bank Current Account

xi. Penalty Recording

This menu shall be used for recording of BPI/CMS related penalties, if any.

Any penalties levied by the DNS Examination Hall In-Charge(s) shall be duly authorized by CMU official. Consequently, the concerned commercial bank shall be debited by the amount of penalty.

Input Fields:

- Bank Name – Current Account of Bank fetched by system
- Penalty number and description (selected from drop down) – can select multiple penalties
- Instance per penalty
- Date of penalty
- Reason for penalty – description field
- Total penalty amount (calculated based on total penalties selected)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter 1 authorizer only. However, authorization to be done by CMU user

IV. Evening Collection Balance Processing

Processing of Evening Collection balances of SBP BSC offices shall be carried out at respective BSC Pool offices. The Examination shall be carried out either via BPAS or DNS machines. For this purpose, the respective versions for BPAS and DNS shall be used for transfer of balances from Vault to Examination hall, processing, packing/destruction etc.

b. Process Description:
This shall have the same processes as BPAS and DNS machine Examination Hall with following changes:

DNS Hall:

- Adjustment of discrepancies through inter/intra office settlement, direct settlement.
- Option for 100% examination or percentage based examination.
- Bifurcation/distinction between balances of various employees based on unique identification (PIN etc.).
- System based output-detailing discrepancies in balances of each official.

BPAS Hall:

- Use of header cards to distinguish between balances of various officers.
- Adjustment of discrepancies through inter/intra office settlement, direct settlement.
- System based output-detailing discrepancies in balances of each official.

Additional functionalities required for Evening Collection Processing described as under:

i. Adjustment of Discrepancies

Adjustments shall be carried out through inter/intra office settlements for following reasons:

- Shortages with percentage adjustment (if selected)
- Counterfeit banknotes
- Excess as per actual

The amount corresponding to discrepancies shall be debited from respective office which shall in-turn recover the same from concerned official.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Financial Transaction		
Step	**Debit**	**Credit**
1	Evening Collection Discrepancy Account of respective office (having the discrepant balance)	SBP BSC Deposit Account
2	Cash deposited by delinquent official	Evening Collection Discrepancy Account of respective office (having the discrepant balance)

V. Manual Examination Hall

Manual Examination shall be carried out in case of machine unprocessable balances.

a. Process Description:

The Examination Hall shall perform following functions:

- Receive banknotes from Bonded, Chest, and Cancelled Notes Vaults for examination and destruction.
- Transfer received balance to Examiners for examination.
- Receive back processed banknotes from Examiners.
- Transfer processed balance to Destruction team.

The processes are further elaborated under respective headings:

i. Receive Banknotes

This menu shall be used for receipt of banknotes from Bonded, Chest, and Cancelled Notes Vaults for examination.

For this purpose, the originating vault shall generate the originating entry in the system. Upon receipt of banknotes at Examination hall, user(s) shall:

Scan QR codes of the Logistic Units received whereupon entire data of the contents of Logistic Units shall be retrieved by the system and captured.

At this point, system shall match the scanned QR codes against originating system entry to carry out automated reconciliation. The entry carried out by the Hall user(s) shall therefore be a responding entry.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit
Suspense Account – Manual Examination Hall	• Bonded Notes Vault Account (Exchange Account – Bonded Notes Vault) – Commercial Bank Name • Chest Notes Vault Account (Invoice Account) – Chest Name • Cancelled Note Vault Account

ii. Percentage Assignment

This transaction shall be used for setting the percentage of banknotes to be examined on sample basis. The percentage set at this stage shall determine the overall shortage in the total balance based on shortages in the sample examined portion.

Input Fields:

- Transaction ID(s) through which balance transferred to Examination Hall
- Input percentage of relaxed portion of balance
- Hall number
- Hall In-Charge ID

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer

iii. Transfer to Examiners

This transaction shall be used for transferring the banknotes to Examiners for examination. User(s) shall be able to manually input the number of trays/quantum of banknotes transferred to each Examiner in the system. Each Examiner shall be identifiable in system through a unique system ID.

Input Fields:

- Transaction ID(s) through which balance transferred to Examination Hall
- Examiner ID

- Number of Cash Trays/Bundles (auto-fetched by system based on scanned QR codes or manually inputted by user)
- Denomination and pieces (auto-fetched from system or manually inputted)

Security Level:
The transactions shall have Level 0 Authorization i.e. 1 inputter.

Accounting Entry:

Debit	Credit
Examiner (Teller Stock Account)	Suspense Account – Manual Examination Hall

iv. Receive Banknotes from Examiners

Consequent to processing, Hall user shall receive the processed balances from respective Examiners. There shall be system controls to ensure that the quantity, denomination & value of balance being received back is the same as originally transferred to the Examiners.

Input Fields:

- Transaction ID(s) through which balance transferred to Examination Hall
- Examiner ID
- Denomination and pieces examined
- Discrepancies including counterfeits/shortages/excess
- Amount (auto-calculated by the system)

Security Level:
The transaction shall have Level 0 Authorization i.e. 1 inputter only.

Accounting Entry:

Debit	Credit
Suspense Account – Manual Examination Hall	Examiner (Teller Stock Account)

v. Transfer Banknotes

This menu shall be used for transferring processed/unprocessed banknotes for further action. User(s) shall be able to transfer processed non-issuable balances to Destruction Team.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Debit	Credit

Exchange Notes Vault Account - Exchange Account	Suspense Account – Manual Examination Hall - Examined

Debit	Credit
Cancelled Notes Vault Account	Suspense Account – Manual Examination Hall - Examined

Debit	Credit
Suspense Account – Destruction Team	Suspense Account – Manual Examination Hall - Examined

xii. Penalty Recording

This menu shall be used for recording of BPI/CMS related penalties, if any.
Any penalties levied by the Manual Examination Hall In-Charge(s) shall be duly authorized by CMU official. Consequently, the concerned commercial bank shall be debited by the amount of penalty.

Input Fields:

- Bank Name – Current Account of Bank fetched by system
- Penalty number and description (selected from drop down) – can select multiple penalties
- Instance per penalty
- Date of penalty
- Reason for penalty – description field
- Total penalty amount (calculated based on total penalties selected)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter 1 authorizer only. However, authorization to be done by CMU user

vi. Adjustment of Discrepancies

This menu shall be used for adjustment of discrepancies encountered in the processed balance such as:

- CMS/BPI penalties
- Shortages with percentage adjustment
- Defective banknotes
- Counterfeit banknotes
- Excess as per actual

Discrepancies as highlighted above, along with penalties shall be debited from concerned commercial bank.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Financial Transaction	
Debit	**Credit**
Commercial Bank Current Account	SBP BSC Deposit Account

VI. Destruction of Balances

This module shall be used by the destruction team users (as nominated by the office from time to time) to mark destruction of balances in the system.

a. Process Description:

The Destruction Module shall perform following functions:

- Receive banknotes from various Examination Halls for destruction.
- Mark destruction of the balances.
- Transfer balances to CO custody for overnight safekeeping if destruction is not carried out.
- Receive balances from CO custody for destruction.

The processes are further elaborated under respective headings:

i. Receive balance for Destruction

This transaction shall be used for receiving balances for destruction from Examination Halls. This shall be a responding entry to the originating entry raised by respective examination hall.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Receive balance from Examination Hall	
Debit	**Credit**
Suspense Account – Destruction Team	Suspense Account – Examination Hall – Examined/Machine Reject

ii. Destruction

This transaction shall be used for marking destruction of balances by the destruction team.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Destruction

Debit	Credit
Suspense Account – Destroyed	Suspense Account – Destruction Team

iii. CO Custody

This menu shall be used for overnight parking of examined balances which are not destroyed on the same day. In such instances where same day destruction is not possible, the balances shall be parked overnight in the Cancelled Notes Vault and taken out on next working day for destruction.

Once the balances have been physically received, user(s) shall manually count the balance received and acknowledge receipt in system via Responding Entry.

On the next working day, user(s) shall execute entry for transfer of balances to the Destruction team via an Originating Entry, which shall be responded to by the Destruction Team. For this purpose, entry shall be generated manually without QR code scanning.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Step 1	**Receive Balance from Destruction Team**	
	Debit	**Credit**
	Suspense Account – CO Custody	Suspense Account – Destruction Team
Step 2	**Receive Balances from CO Custody**	
	Debit	**Credit**
	Suspense Account – Destruction Team	Suspense Account – CO Custody

iv. BDS machine linkup:

The Banknote Disintegration System shall be linked with the system through an upload utility whereupon the logs shall be imported from the machine into the system in any acceptable format.

d. Currency Accounting

I. Chest Reporting

The purpose of this menu is to receive data from Chests, which shall be used to generate accounting entries for Chest Notes Account.

The inputs in this menu shall collect following data from Chests transactions using the online platform:

- Opening Chest Balance
- Total Receipts in Chest
- Total Withdrawals from Chest
- Closing Chest Balance
- Denomination and values for Notes and Coins

In order to keep provision for offline connectivity, system shall also be able to upload Currency Chest Slips Summary (containing the above information) in .csv/.xml format.

a. Process Description:

This transaction shall perform following functions:

- Collect data from transactions of 224 Chests (Number of chests may vary in future) carried out on the system that should be configurable.
- Allow user to upload reports such as F157 Summary and T.E.2 slips in .csv or xml format, as back-up for offline connectivity.
- Prepare summary of transactions for user(s) including net debit/credit position based on steps (i) or (ii).
- Carry out accounting transaction for debit/credit of Chest Notes Account.
- Generate various reports.

The processes are further elaborated under respective headings:

i. Data Collection from 224 Chests Branches

The inputs in this menu shall collect and consolidate data of transactions carried out at Chests on the system. Each Chest shall carry out the consolidation subsequent to generation of EoD signal.

Separate report shall record and consolidate following transactions of each Chest:

- Opening Balance
- Total Receipts
- Total Withdrawals
- Remittances Received
- Remittances Dispatched
- Closing Balance
- Denomination and Values for Notes and Coins

ii. Upload Utility

This menu shall serve as back-up in the event of offline connectivity and data acquisition of Chests. For this purpose, each Chest shall separately submit its T.E.2 slips (in .csv format) whereas NBP Main Branch Karachi and/or Main Branch Karachi of other commercial bank designated as Chest shall submit F157 (in .csv or xml format) Summary through alternate means such as DAP, Email etc.

The User(s) shall subsequently upload these reports in the system through an upload utility whereupon system shall fetch data and auto-input the same in corresponding fields in the system. Subsequently, user shall input the same and get it authorized.

Security Level:
The transactions shall have Level 1 Authorization i.e. 1 inputter and 1 authorizer.

iii. Generate Summary for Accounting Entry

Based on the data collected at I and/or II, the system shall generate a summary for the accounting transaction to be executed on Chest Note Account. The system shall therefore provide a value for double entry accounting involving Credit/Debit of Chest Notes Account and contra-account(s) of the Home Note Account.

iv. Reports

The menu shall provide various data concerning the balances held in Chests, such as:

- Chest Balances Aging
- Chest Balances Denomination-wise, Category-wise and Bank-wise
- Remittances received and dispatched

II. Home Note Accounting

The Home Note Accounts manage the liability side of the central bank i.e. the cash/currency. Therefore, this menu shall be used to manage the Home Note Accounts, which are as under:

- Currency Account
- Stock Account
- Exchange Account
- Invoice Account
- Chest Notes Account
- Cancelled Notes Account
- Circulation Account

Each of the above accounts shall be further bifurcated into sub-accounts. Each sub-account shall be linked to corresponding transactions carried out at SBP BSC offices and Chests during the day. Resultantly, the impact of all the transactions carried out in the system shall be consolidated at day end. Based on the summary of transactions, respective accounts shall be debited/credited.

a. Process Description:

This transaction shall perform following functions:

- Fetch summary of Chest transactions from Chest Reporting Module in the system.
- Fetch data of daily transactions carried out in the system from SBP BSC offices.
- Prepare summary of transactions for user(s) including net debit/credit position based on steps (i) and (ii).
- Generate accounting transactions for debit/credit of Home Note Accounts based on Double Entry Accounting System.

The processes are further elaborated under respective headings:

i. Fetch Chest Data

The inputs in this menu shall fetch summary of Chest transactions generated in the Chest Reporting Module.

ii. Fetch Data from SBP BSC offices

The inputs in this menu shall fetch data of daily transactions carried out in the system from SBP BSC offices. The individual transactions shall be mapped against the impacted accounts i.e. debit side and credit side.

iii. Generate Summary for Accounting Entry

Based on the data collected at I and II, the system shall generate (configurable) a summary for the accounting transactions to be executed on the Home Note Accounts.

The system shall therefore provide a value for double accounting entry involving Credit/Debit of respective Home Note Accounts and contra-account(s) there against.

Sample summary is as under:

STATE BANK OF PAKISTAN
SBP BSC [Bank] Karachi
HOME NOTE CENTERIZAED TRANS.
FOR THE DATE: 08 NOV 2023
Date and Time of Printing: 08 NOV 2023 05:23:38PM CONSOLIDATED REPORT

Source	Source Desc.	Note Cat.	Ver	Line	Debit	credit	Rs.5/-	PKR5.000	Rs.10/-	PKR10.0	Rs.20/-	PKR20.0	Rs.50/-	PKR50.00	RS. 75.SBP/-	RS. 75.PAK/-	Rs.100/-	PKR100.0	Rs.500/-	PKR500.000	Rs.1000/-	PKR1000.0	Rs.5000/-	REPORT.LINE	TOT.PIECES	TOT.VALUE
CD-25	Transfer from fresh vlt to PSPC Exch vlt	13962-13961	TELLER,GIC.NV007.1	23	PKR1396201	PKR1396106	0	0	0	0	0	0	0	0	0	0	0	0	0	200000	0	1150000	750000	From Stock PSPC Fresh	2100000	5000000000
SUB TOTAL							0	0	0	0	0	0	0	0	0	0	0	0	0	200000	0	1150000	750000		2100000	5000000000
CD-25	Re-issuable Notes to Exchange Vault	13962-13963	TELLER,GIC.EC001	26	PKR1396202	PKR1396301	0	0	0	4144	0	2000	0	5699	1000	900	0	3934	0	3854	0	7348	3412	Receipt	32291	27237290
CD-25	Defective Notes to Note Vault	13962-13963	TELLER,GIC.EC002.2	28	PKR1396202	PKR1396301	0	0	0	37	0	7	0	9	0	0	0	33	0	41	0	86	44	Receipt	257	330780
CD-25	Receive Bondad Notes Deposits	13962-13963	TELLER,GIC.BN001	29	PKR1396202	PKR1396301	0	0	0	0	0	0	0	0	0	0	0	0	0	239000	0	258000	48000	Receipt	345000	617500000
CD-25	Undefaced Notes to Cancel Vault	13962-13963	TELLER,GIC.EC002.1.UDEF	32	PKR1396202	PKR1396301	0	0	0	3200	1	200	0	600	0	0	0	300	0	800	0	200	200	Receipt	5501	1696020
SUB TOTAL							0	0	0	7381	1	2207	0	6308	1000	900	0	4267	0	243695	0	265634	51656		583049	646764070
CD-25	SBP Offices Vouchers - Dr Voucher	13962-13963	TELLER,GIC.CLEOD001	35	PKR1396203	PKR1396301	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Debit Voucher	0	0
SUB TOTAL							0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0	0
CD-25	PSPC Payment Bank box to Banks	13963-13962	TELLER,GIC.NV007.1	38	PKR1396301	PKR1396202	0	0	0	0	0	0	0	0	0	0	0	0	0	200000	0	1150000	750000	Home Note Issued PSPC	2100000	5000000000
SUB TOTAL							0	0	0	0	0	0	0	0	0	0	0	0	0	200000	0	1150000	750000		2100000	5000000000
CD-25	Transfer Re-issuable notes to Counter	13963-13962	TELLER,GIC.BB003	40	PKR1396301	PKR1396202	0	0	0	1	0	23000	0	956	200	900	0	964	0	132	0	524	542	Home Note Issued	27219	3986710
CD-25	Transfer Fresh	13963-	TELLER,GIC.BB004	41	PKR1396301	PKR1396202	0	0	0	400600	0	56000	0	40000	2000	0	0	25100	0	1000	0	1100	100	Home Note	525900	11886000

STATE BANK OF PAKISTAN
SBP BSC [Bank] Karachi
HOME NOTE CENTERIZAED TRANS.
FOR THE DATE: 08 NOV 2023
Date and Time of Printing: 08 NOV 2023 05:26:36PM CONSOLIDATED REPORT

Event Source	Source Desc.	Note Cat.	Ver	Line	Debit	credit	Rs.5/-	PKR5.000	Rs.10/-	PKR10.0	Rs.20/-	PKR20.0	Rs.50/-	PKR50.00	Rs.75.SBP/-	Rs.75.PAK/-	Rs.100/-	PKR100.0	Rs.500/-	PKR500.000	Rs.1000/-	PKR1000.0	Rs.5000/-	REPORT.LINE	TOT.PIECES	TC
0023	CD-25	Transfer from fresh vlt to PSPC Exch vlt	13962-13961	TELLER,GIC.NV007.1	23	PKR1396201	PKR1396106	0	0	0	0	0	0	0	0	0	0	0	0	200000	0	1150000	750000	From Stock PSPC Fresh	2100000	50
0026	CD-25	Re-issuable Notes to Exchange Vault	13962-13963	TELLER,GIC.EC001	26	PKR1396202	PKR1396301	0	0	0	4144	0	2000	0	5699	1000	900	0	3934	0	3854	0	7348	3412	Receipt	32291	27
0028	CD-25	Defective Notes to Note Vault	13962-13963	TELLER,GIC.EC002.2	28	PKR1396202	PKR1396301	0	0	0	37	0	7	0	9	0	0	0	33	0	41	0	86	44	Receipt	257	33
0029	CD-25	Receive Bondad Notes Deposits	13962-13963	TELLER,GIC.BN001	29	PKR1396202	PKR1396301	0	0	0	0	0	0	0	0	0	0	0	0	239000	0	258000	48000	Receipt	345000	61
0032	CD-25	Undefaced Notes to Cancel Vault	13962-13963	TELLER,GIC.EC002.1.UDEF	32	PKR1396202	PKR1396301	0	0	0	3200	1	200	0	600	0	0	0	300	0	800	0	200	200	Receipt	5501	169
0035	CD-25	SBP Offices Vouchers - Dr Voucher	13962-13963	TELLER,GIC.CLEOD001	35	PKR1396203	PKR1396301	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	Debit Voucher	0	0
0038	CD-25	PSPC Payment Bank box to Banks	13963-13962	TELLER,GIC.NV007.1	38	PKR1396301	PKR1396202	0	0	0	0	0	0	0	0	0	0	0	0	200000	0	1150000	750000	Home Note Issued PSPC	2100000	50
0040	CD-25	Transfer Re-issuable notes to Counter	13963-13962	TELLER,GIC.BB003	40	PKR1396301	PKR1396202	0	0	0	1	0	23000	0	956	200	900	0	964	0	132	0	524	542	Home Note Issued	27219	39
0041	CD-25	Transfer Fresh notes to Counter	13963-13962	TELLER,GIC.BB004	41	PKR1396301	PKR1396202	0	0	0	400600	0	56000	0	40000	2000	0	0	25100	0	1000	0	1100	100	Home Note Issued	525900	11
0042	CD-25	Re-Issuable notes to Evening Collection	13963-13962	TELLER,GIC.EC001.L1AB.1.1	42	PKR1396301	PKR1396202	0	0	0	0	0	2	0	0	0	0	0	3	0	0	0	0	2662	Home Note Issued	2667	13
		Receive																								

iv. Accounting Entry

Based on the summary generated at III, the system shall auto-generate accounting entries for Home Note Accounts in line with the Double Entry Accounting system. The values for debit/credit shall be automatically fetched from the summary generated at III and auto-filled in the system-generated transactions. However, the field shall be editable/writable. The user(s) shall review each transaction, input and authorize.

In addition to the abovementioned transactions, there shall also be a separate page for passing adjustment entries/transactions on accounts. However, the adjustment transactions shall have Level 2 authorization.

Summary of relationship between accounts and corresponding cash transactions is referenced below:

Home Note Account	Cash Side Balances
Stock Account	Balances of the Fresh Notes Vault in Issue Circle Office
Exchange Account	Balances of the Exchange Vault (including Box Balances) and Bonded Notes Vault at Issue Circle Office
Chest Note Account	Balances held with Chests and BSC offices (All Vaults/Box Balances except Cancelled Notes Vault) located in the Issue Circle. For Karachi Circle: Chests + SBP BSC offices in the Circle For other Circles: SBP BSC offices in the Circle
Invoiced Account	Balances of the Chest Notes Vault in Issue Circle Office
Cancelled Account Circle	Cancelled Notes held in the Issue Circle Office
Cancelled Account BSC Chest office	Cancelled Notes held in the BSC office located in the Circle
Circulation Account	Banknotes issued in the Circle

Input Fields

- Credit Account
- Debit Account
- Denominations and Pieces
- Narration/Description

III. Value Accounting

The Value Accounts manage the assets side of the central bank, which include precious metals, government securities, foreign currencies, IMF units, coins etc.
The assets of the Bank consist of gold coin, gold bullion, silver bullion; special drawing rights held with the International Monetary Fund or approved foreign exchange, rupee coins and rupee securities to such an aggregate amount, as is not less than the total liabilities of the Issue Department i.e. the banknotes in circulation. The objective of the value account is to show the constitution of assets against the note circulation.
The inputs under this menu shall fetch their values from various transactions carried out at SBP BSC offices, which affect the asset side. Resultantly, the impact of all the transactions carried out in the system shall be consolidated at day end. Based on the summary of transactions, respective accounts shall be debited/credited.

a. Process Description:
This transaction shall perform following functions:

- Fetch data of daily coin transactions and stock from Chests.
- Fetch data of daily transactions carried out in the system from SBP BSC offices.
- As per advice of FD and TOD, conduct accounting entries at respective SBP BSC offices (Acquisition, appreciation and depreciation of Gold, Securities etc.) w.r.t assigned value date. (back dated).
- Two sets of book-keeping shall be maintained i.e. value dated and transaction dated. In case of any backdated transaction, system shall only automatically update the value-dated books retrospectively from value date of transaction carried out. However, the transaction-dated books shall not be updated retrospectively.
- Prepare summary of transactions for user(s) including net debit/credit position based on steps (i) and (ii).
- Generate accounting transactions for debit/credit of Value Accounts based on Double Entry Accounting System.

The processes are further elaborated under respective headings:

i. Fetch Data from SBP BSC Offices

The inputs in this menu shall fetch data of daily transactions, including coin stock, issuance, receipt etc., gold/securities acquisition, appreciation and/or depreciation carried out in the system from SBP BSC offices. The individual transactions shall be mapped against the impacted accounts i.e. debit side and credit side.

ii. Fetch data from Chests

This transaction shall fetch data of daily coin transactions and stock etc. from Chests.

iii. Generate Summary for Accounting Entry

Based on the data collected at I and II, the system shall generate a summary for the accounting transactions to be executed on the Value Account.
The system shall therefore provide a value for double accounting entry involving Credit/Debit of various accounts.

iv. Accounting Entry

Based on the summary generated at III, the system shall auto-generate accounting entries for Value Accounts in line with the Double Entry Accounting system. The values for debit/credit shall be automatically fetched from the summary generated at III and auto-filled in the system-generated transactions. However, the field shall be editable/writable. The user(s) shall review each transaction, input and authorize. Users may also perform accounting entries directly in a particular value date following which all value dated books shall be updated retrospectively whereas transaction dated books shall be updated in sequence of transactions only.

In addition to the abovementioned transactions, there shall also be a separate page for passing adjustment entries/transactions on accounts. However, the adjustment transactions shall have Level 2 authorization.

Correlation of various transactions/occurrences with value accounting is summarized below:

Transaction Type	Data Source	Description	Debit	Credit

Net Circulation Movement	Cash Department - KO	Currency Expansion	Govt. of Pakistan Securities	Currency in Circulation
		Currency Contraction	Currency in Circulation	Govt. of Pakistan Securities
Foreign Reserve Reevaluation	Treasury Operations Department	Appreciation	Foreign Reserve Account	Govt. of Pakistan Securities
		Depreciation	Govt. of Pakistan Securities	Foreign Reserve Account
		Withdrawal	Govt. of Pakistan Securities	Foreign Reserve Account
		Placement	Foreign Reserve Account	Govt. of Pakistan Securities
Revaluation of Gold	Finance Department	Appreciation	Gold Reserve Account	Govt. of Pakistan Securities
		Depreciation	Govt. of Pakistan Securities	Gold Reserve Account
Coins	All BSC and chests	Sale of Coins	Currency in Circulation	Coin Reserve Account
		Receipt of Coins	Coin Reserve Account	Currency in Circulation

Input Fields

- Credit Account
- Debit Account
- Denominations and Pieces
- Narration/Description

e. Currency Management Unit

The purpose of the Currency Management Unit is to coordinate with external stakeholders for deposit and withdrawal of banknotes, manage stakeholder movement in SBP BSC offices, process cases pertaining to levy of penalties and processing payments related to currency management functions.

a. Process Description:

The menu shall have the following functionalities:

i. Deposit/ Withdrawal Request

The process has been explained in Commercial Bank, IEC and Chest Section.

ii. External Stakeholder Management

The purpose of the module is to allow the BSP BSC Offices to access data of all external stakeholders who shall visit the office for deposit and withdrawal of cash. The users of CMU shall have a management dashboard where all the information concerning remittances/deposits/withdrawals shall be summarized and viewed. The details of the modules from which the information shall be sought are as follows:

1. Request for Withdrawal/Issuance of Balance –Commercial Bank
2. Initiate Payment for Withdrawal –Commercial Bank
3. Remittance Dispatch- Chest
4. Remittance Receipt- Chest
5. Dispatch Consignment- PSPC

The CMU Unit shall then forward this report to concerned IBSU Unit through email.

iii. Penalty Imposition and Reversal

The purpose of the module is to consolidate all cases of penalty imposition emanating from various operational areas, and to process case for imposition of penalties to the banks.

The CMU menu shall have following functionality:

a. View penalties imposed by various operational areas such as vaults, examination halls etc. OR Impose penalties in other areas. User may select multiple penalties from a list
b. Authorize transactions concerning penalty imposition inputted by the aforementioned operational areas
c. Generate letter for each commercial bank stipulating penalties imposed in a particular date/period.
d. Forward system generated letter to concerned Commercial Bank
e. At this point system shall have 3 outcomes:
   - In case waiver is not granted, debit the concerned Commercial Bank after lapse of pre-defined time period (period may be changed by Super User)
   - In case of grant of waiver, the transaction for deduction of the penalty shall not be executed.
   - In case of appeal being accepted, initiate process for refund of penalty to concerned commercial bank

Accounting Entries

Financial Transaction for penalty imposition	
Debit	**Credit**
Commercial Bank Current Account	CMS (PL 61321)

Financial Transaction for penalty refund	
Debit	**Credit**
CMS (PL 61321)	Commercial Bank Current Account

iv. Travel Allowance/Daily Allowance (TA/DA) Claim:

Once the banknote consignment is received at the respective SBP BSC office, the PSPC/SBP BSC potdar is relieved through a system generated certificate. He then submits a TA/DA claim form to the respective SBP BSC Office, which received the consignment. The BSC Office shall check the details provided in the TA/ DA Claim form against the data available in the system, and verify the TA claim from travel documents of the potdar.

This transaction shall perform the following functions:

- Calculate number of days applicable for daily allowance through Consignment ID, date of consignment dispatch and date of relieving of PSPC/ SBP BSC Potdar
- Calculate the total Daily Allowance based on pre-defined DA rates in system (for each entity)
- Allow user to enter amount of Travelling and other allowances (if any).
- Calculate total allowances applicable
- Carry out payment in lieu of TA/DA
  - Debit- BSC Current Account
  - Credit- PSPC Commercial Bank Account or BSC Official's Bank Account (as the case may be)

The transaction shall contain the following information:

- Consignment ID- To be manually entered by the BSC user
- Number of Days- To be auto-calculated by the system by calculating number of days from date of dispatch to date of relieving of potdar.
- Rate of DA- To be locked in system as per pre-defined rate sheet. However, provision for amendment in rate shall be allowed, to **Super User Only.**
- Total DA- The system shall auto- calculate the total DA by multiplying number of days and per day DA rate.
- TA Amount- The user shall manually enter the TA amount in the system.
- Other Payments (Optional field) - Provision for other payments (if any) may be included, along with narration field.
- Total Payment to Potdar- The system shall auto-calculate the total payment by adding "Total DA", "Total TA" and "Other Payments".
- Email Address- (On which payment notification is to be sent)
- Confirm Payment

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Once the transaction is authorized, the total amount of TA/DA shall be credited in PSPC's commercial bank account and a system-generated notification shall be sent to PSPC in system, and/or by email to designated email IDs. In case of BSC Official, the amount shall be credited in Official's Bank Account and notification shall be sent via email ID.

Accounting Entry:

PSPC Consignment	
Credit	**Debit**
PSPC's Commercial Bank Account	BSC Current Account

Credit	Debit
BSC Official's Commercial Bank Account	BSC Current Account

v. Discrepancy Management:

The purpose of the module is to allow SBP BSC Offices access to data of all discrepancies detected in balances by commercial banks' through IEC or via receipt from BSC Office or Chest. Once a discrepancy is reported by the bank, the respective SBP BSC office will evaluate the claim, and if the same is found correct, the banks' current account shall be credit while the relevant account (as per nature of discrepancy) shall be debited.

The transaction shall have the following functionalities:

- Allow user to view all "In Process" "Discrepancy Reports";
- Allow user to accept the claim, in which case the amount shall be credited in the commercial banks' current account;
- Allow user to reject the claim, in which case the case shall be closed and the status of the "Discrepancy Report" shall be "Closed".

f. Machine Utilization Logs

This module shall be used for maintaining operations data on machine utilization across SBP BSC offices. This module shall perform following functions:

- Provide utility for uploading DNS/CNS machine logs in the system against aforementioned unique ID of each machine.
- Provide utilization information of each machine office wise using an information dashboard

Input Fields:

For Routine Operation Log:

- Machine ID
- Date
- Operation mode
- Sorted categories
- Denomination and pieces of banknotes processed per category

g. Finance Department – SBP

The Finance Department being on policy side of Currency Management, is responsible for deciding & communicating fresh banknotes to be printed by PSPC in a year, makes payments

to PSPC against said printing and also monitors various sensitive reports and report for data collection & reporting such as Statement of Affairs, Currency in Circulation, Banknotes held with commercial banks and Chests, Banknotes Issued etc.

a. Process Description:

The FD-SBP shall perform the following functions:

- Place Annual Indent for Fresh Notes with PSPC- explained in PSPC Modules
- Make payments to PSPC against printed & delivered banknotes- explained in PSPC Modules
- View various reports concerning currency in circulation, deliveries, asset & liability statement of SBP

i. Review and Monitor Reports

The FD-SBP carries out review and periodic monitoring of various system reports concerning accounting, assets & liabilities etc.:

- Statement of Affairs (AC-9)
- Home Note & Value Account Trial Balance
- Chest Holding
- Balances held with commercial banks
- Ledgers of various accounts
- Currency in Circulation

h. PSPC

Pakistan Security Printing Corporation (PSPC) is a fully owned subsidiary of the State Bank of Pakistan (SBP) and is responsible for printing and supply of banknotes to offices of the State Bank of Pakistan, Banking Services Corporation (SBP BSC).

The process involves denomination wise packaging of fresh banknotes in shrink-wrapped bundles, with each bundle containing 10 packets of 100 banknotes each. These bundles are then organized into boxes, with 10 bundles in each box. Additionally, 50 such boxes are combined to create a pallet. Consequently, each pallet holds a total of 500,000 banknotes. However, system shall have the provision to define bundle, box and pallet sizes. This change shall only be carried out by System Administrator/ Super User.

To facilitate tracking, a three-tier QR coding system shall be implemented. Bundles shall be marked with a generic QR code indicating the category and banknote denomination. At the box and pallet levels, unique QR codes shall be used. These QR codes shall contain detailed information about the contents of the respective packaging unit. When scanned, the system shall record all pertinent information about the respective sub packaging units held in the box or pallet.

The banknotes are printed by PSPC as per annual denomination wise indent (printing order) of fresh banknotes which is placed by Finance Department, SBP. Thereafter Currency Management Department (CMD) and PSPC draft an annual delivery schedule, while office –wise monthly delivery plans are finalized on monthly basis. These schedules are meant for planning purposes and changes in the delivery schedule and/or denomination mix is carried out as per the on ground situation.

The supply of banknotes from PSPC to SBP BSC offices is undertaken throughout the year. Each office wise consignments may contain multiple denominations, and the same shall be tracked in the system through a unique consignment ID.

The inventory management at PSPC shall differ from other stakeholders, and the following category of banknotes shall be used for management and tracking of banknote inventory solely for PSPC:

- Inventory Held for Dispatch
- Inventory in Transit

a. Process Description:

The PSPC shall perform the following functions:

- View Indent of Banknotes
- View Annual Delivery Schedule
- View Monthly Delivery Schedule
- View Inventory Available for Dispatch
- Generate QR Codes for Fresh Banknotes
- Create Fresh Notes Consignment for Fresh Notes by scanning pre-prepared pallets.
- Dispatch Consignment of Fresh Notes, by adding Potdar and Police Information

The processes are further elaborated under respective headings:

i. Indent Placement

This menu shall have inputting rights solely for users of FD SBP for placing annual printing order of banknotes with PSPC. Provision for multiple orders during the year or amendment in the indent may also be made available in the system to account for subsequent changes in indent, as well as issuance of any new commemorative banknotes.

The following fields shall be required in the system:

- Financial Year
- Generation
- Denomination
- Quantity
- Value

The following fields shall be optional in the system:

a. Signature- Signature of Governor on the banknotes

b. Numbering- Whether numbering of notes will be in continuation of existing series or otherwise

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Reports:

The system shall have capability to extract time period based data of indent placed by Finance Department. The rights for viewing the reports shall be provided to PSPC, FD and CMD users.

ii. Annual Delivery Schedule:

The annual delivery schedule is agreed between PSPC and CMD for yearly planning purposes only and shall be recorded in system by CMD.

The following fields shall be required in the system:

- Year
- Month
- Denominations
- Quantity
- Value (auto calculated by the system)

In addition, user shall also be able to amend the schedule.

Security Level:

No authorization shall be required for the transaction.

Reports:

The system shall have capability to extract time period based data, with viewing rights provided to PSPC, FD and CMD users.

iii. Monthly Delivery Schedule:

The monthly delivery schedule is agreed between PSPC and CMD before the start of each month for planning purposes only. PSPC provides details regarding "Inventory Held for Dispatch" that may be delivered within the next month. Thereafter CMD provides requirement for office-wise deliveries.

The following fields shall be required in the system:

- Month, Year
- BSC Office Name(s)
- Denominations
- Quantity
- Value (to be auto calculated by the system)

It may be noted that while in most cases consignments dispatched to offices are sent as per the agreed monthly delivery plan, at times, due to certain issues, the quantities of banknotes and destinations have to be changed. As such, user shall also be able to amend the schedule during the month.

Security Level:

No authorization shall be required for the transaction.

Reports:

The system shall have capability to extract time period based data, with viewing rights provided to PSPC, FD and CMD users.

iv. Generate QR Codes for Fresh Banknotes:

This menu shall exclusively be used by PSPC for generation of three tier QR codes. For the purpose, the system shall have capability to generate QR codes, which shall be pasted onto the bundles, boxes and pallets.

Once the pallets are formed and QR codes are generated in the system, the system shall automatically update the same in "Inventory Held for Dispatch" category. QR code generation should be developed in manual/individual as well as bulk mode through CSV upload. In addition, vendor is to provide API for connectivity with other systems.

Security Level:

The transaction shall be Level 1 authorization, i.e.1 inputter and 1 authorizer.

Interface Requirement:

QR code Printer

v. Inventory Management

a) Inventory Held for Dispatch

As soon as QR codes are generated at the pallet level, all the data shall automatically be updated in the "Inventory Held for Dispatch" category. The same shall be retrievable in report "Inventory Held for Dispatch" which shall contain the following information:

- Denominations
- Quantity
- Value
- Cypher Numbers

The report shall be available for users of PSPC, FD and CMD.

b) Inventory in Transit

Once the banknote consignments are dispatched from PSPC, the same shall be deducted from "Inventory Held for Dispatch" and shall be added in "Inventory in Transit" category, which shall contain the following consignment wise information:

- Denominations
- Quantity
- Value
- Cypher Numbers
- Receiving Office

The report shall be available for users of PSPC, FD and CMD.

vi. Create Consignment

PSPC shall create office-wise consignment for delivery of banknotes as per the agreed schedule. The system shall have the following requirements:

- Consignment ID- The system shall auto generate a unique consignment ID for each consignment.
- Value of banknotes to be dispatched
- Receiving Office- Name of the BSC Office to whom consignment is being sent.
- QR code Scanning- The PSPC user shall scan the QR codes of the denomination –wise pallets as agreed in the delivery plan, and the data shall be auto inputted into the relevant system version, including
    a. Denominations
    b. Quantity of Banknotes
- Denomination Wise and Total Value of Banknotes shall automatically be calculated in the system.

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Once the transaction is committed, system shall generate a unique consignment code for the remittance.

Interface Requirement:

QR code Scanner

vii. Dispatch Consignment

The purpose of this transaction is to dispatch consignment of fresh notes from PSPC to SBP BSC Office.

Owing to the quantum of banknotes, it is probable that date of consignment creation and packing may be different. Further, each banknote consignment has to be escorted by a PSPC representative, called the "Potdar" as well as Police Escort. The "Dispatch Consignment" transaction shall have the following fields:

- Consignment ID- The consignment ID shall be manually entered into the system, which shall display all the information as mentioned in "Create Consignment ID" onto the screen.
- Potdar Assignment- Name of the PSPC Potdar
- Escort Officer- Name of In-Charge Police Escort

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Once the transaction is authorized, a system generated certificate for the potdar and police shall be printed as per standard format.

viii. Travel Allowance/Daily Allowance (TA/DA) Claim:

PSPC shall be able to view report of cases of TA/DA claims sent to SBP BSC Offices, their status and the receive payment notifications.

ix. Misprint Notes Module:

This module shall enable the PSPC to receive consignment of Misprint Notes in the system based on the Originating consignment number and respond accordingly.

Subsequently, it shall allow PSPC to upload results of misprint notes analysis carried out by them consequent to which pop-up alert shall be sent to concerned SBP BSC Office, CMD and FD SBP.

Thereafter, PSPC shall dispatch the misprint notes in the system to the initiating SBP BSC Office for destruction, upon which alerts shall be sent to concerned SBP BSC Office, CMD and FD SBP.

x. Counterfeit Notes Module:

This module shall enable the PSPC to receive consignment of counterfeit notes in the system based on the Originating consignment number and respond accordingly.

Subsequently, it shall allow PSPC the option to upload results of counterfeit notes analysis carried out by them consequent to which pop-up alert shall be sent to concerned SBP BSC Office, CMD and FD SBP.

However, concerned SBP BSC office shall also have the option to upload Forensic Analysis report in the system. This shall be an excel/.csv etc. based upload mechanism.

Thereafter, following two scenarios may arise:

- PSPC shall mark destruction of the counterfeit notes in the system upon which alerts shall be sent to concerned SBP BSC Office, CMD and FD SBP.

Accounting Entry:

Debit	Credit
Counterfeit Notes Suspense Account – Destruction	Counterfeit Notes Suspense Account – PSPC

- PSPC shall dispatch the counterfeit notes to respective SBP BSC Office as a consignment marking the Originating Entry, which shall be responded to by respective office.

Accounting Entry:

Debit	Credit
Counterfeit Notes Suspense Account (of concerned office) – CO Custody	Counterfeit Notes Suspense Account – PSPC

xi. Payment of Printing Charges

This transaction shall be used by Finance Department for making payment of printing charges. Consequent to receipt of invoice from PSPC, the FD-SBP shall make payments in lieu of printing charges. For this purpose, the rate table shall be fed to the system at the time of execution of agreement between FD-SBP and PSPC, and may only be amended by Super User. Director FD-SBP shall authorize the rate table.

Upon receiving invoice from PSPC, the user at FD-SBP shall input the number of pieces against respective denominations for the system to calculate the overall payment to be made in lieu of printing costs.

The system shall allow the FD User to adjust for payment of printing charges in lieu of misprint notes (to be manually entered by user).

Accounting Entry:

Financial Transaction	
Debit	**Credit**
FD-SBP	PSPC Account

i. National Bank of Pakistan/Chest Service Provider

Currently National Bank of Pakistan (NBP) provides agency services to SBP through a network of 224 chests/ sub-chests, for receipt and issuance of banknotes (In future any other bank may also be assigned such services). The Chests are considered as an extension of the SBP and balance sheet relief is provided to NBP on all balances held in Chest/ Sub Chest vaults. Similarly, the accounting of these balances is also similar to those of balances in SBP BSC Vaults. Presently, only some branches of NBP have been designated as Chest branches, however system shall allow addition/removal of branches of NBP as chests as well as allow inclusion of branches of commercial banks which have been designated as Chest branches.

Process Description:

This menu shall perform the following functions:

- Generation of QR codes for various categories of banknotes packed in cash trays;
- Receive balance from commercial banks against consignment IDs;
- Issue balance to commercial banks against consignment IDs;
- Request for Remittance (Deposit) of Balances with SBP BSC
- Receive Balance from SBP BSC
- Dispatch Balance to Chest
- Receive Balance from Chest
- Issue Balance to Government Banking Counter
- Receive Balance from Government Banking Counter
- Preparation of Day End Reports- TE-2 & F-157
- Reporting of discrepancies (if any) found in the received balances

i. Generate QR Codes:

This menu shall be used for generation of QR codes, which shall be pasted on the cash trays.

QR codes for various categories of banknotes shall be generated by respective Chest before deposit of the same at SBP BSC Office. Information on the QR code shall be as per the defined QR code scheme.

The following information shall be included in the QR codes:

- Category of Banknotes
- Denomination
- Generation
- Quantity of Banknotes
- Chest Name
- Serial number of seals against each tray (Each cash tray shall have a different seal)

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Interface Requirement:

QR code Printer

ii. Receive Deposit/Withdrawal Request:

This menu shall be used by chests to view various live deposit/withdrawal requests generated by commercial banks. The request shall have a unique ID.

The following functionalities shall be available in the system:

- Allow users to view details of requests by transaction type i.e. deposit and withdrawal.
- Allow users to accept requests without/with modification;
- Creation of consignment in the system for dispatch to receiving entity.

In case the user chooses to amend request, the following fields shall be displayed which may be adjustable.

- Denomination
- Quantity of Banknotes

- Value – to be auto calculated by the system
- Date assigned for Deposit

Security Level:
The transaction shall be a responding entry and require no inputting but rather authorization (with/without amendment) in system.

iii. Receive Deposit

Consequent to accepting the deposit request, user shall use this menu for receiving deposit. This menu shall be used for receiving balances from commercial banks through QR code scanning. The categories of banknotes that can be received shall be reissue, soiled, machine reject or any other category later on defined in the system.

The first step for this process shall be approval/amendment/rejection of request for deposit from Commercial Banks as covered in previous section. In case of approval/amendment, suitable date shall be assigned to the bank for deposit.

Once the balance is physically received, the cash tray(s) shall be scanned and system shall reconcile the scanned tray(s) against consignment details in system to achieve matching. If matched, user(s) shall receive the deposit and credit the concerned Commercial Bank. The transaction shall be initiated from CBA and automatically settled through linked settlement platform/system.

Security Level:
The transaction shall have Level 2 Authorization i.e. 1 inputter, 2 authorizers. One Authorization to be done at Chest level whereas second Authorization to be done at BSC level.

Interface Requirement:

QR code Scanner

Accounting Entry:

Credit	**Debit**
Liability Account - CBA	Chest Notes Account
Financial Entry:	
Credit	**Debit**
Commercial Bank – Current Account	Liability Account – T-24 Banking

iv. Deduction of Charges

At the time of receiving deposit of reissue category (only) from commercial bank, system shall auto debit the commercial bank by 0.12% (configurable for update by SPU-Finance and/or SCAD SBP BSC) of the value of deposited amount. Only the Super User shall have authority to change the rate. The charge shall not be deducted in case of any other category of balance.

Accounting Entry:

Debit	Credit
Commercial Bank – Current Account	BSC Deposit Account

v. Issue Balances to Banks:

The purpose of this menu is to issue balances to commercial banks from the vault at Chest.

The following functionalities shall be included in the system:

i. Allow user to create consignment by scanning QR codes on cash trays;
ii. Allow user to dispatch consignment once payment is received.
iii. Issue balances to commercial banks against requisite financial accounting transactions.

For this purpose, the originating entry shall be generated by Chests in the system. For creation of consignment, following steps shall be carried out:

Scan QR codes of the logistic units (bundle, cash trays, boxes, pallets) and make part of the consignment. Entire data of the logistic units shall be retrieved by the system and captured. Moreover, following fields shall be populated by the system based on data retrieved:

- Denomination
- Number of pieces
- Value (to be auto calculated by the system)
- Logistic Unit Number
- Number of logistic units
- Date of consignment dispatch
- Request Reference Number (to be inputted by user)
- Receiving commercial bank.

Consequent to the above, user shall carry out this transaction to issue balance to respective commercial bank upon which below mentioned accounting entries shall take place.

Security Level:

The transaction shall have Level 2 Authorization i.e. 1 inputter, 2 authorizers. One Authorization to be done at NBP Chest level whereas second Authorization to be done at BSC level.

Accounting Entry:

Debit	Credit
Liability Account - CBA	Chest Notes Account
Financial Entry:	
Credit	**Debit**

Liability Account – T-24 Banking	Commercial Bank – RTGS Receipt

vi. Acknowledgement by Commercial Bank against Receipt of Cash:

The system shall have functionality of generating random One Time Passcode (OTP) at the time of issuance by respective Chest.

This OTP shall be generated once the Chest users have passed transaction for issuance of banknotes to the commercial bank and the OTP shall only be visible to concerned Commercial Bank user.

Upon receiving the banknotes, the concerned commercial bank representative shall share the OTP with Chest user. The chest user shall enter OTP in this transaction to mark acknowledgement of receipt of banknotes by the commercial bank.

vii. Issue Balances to Counter

Chests also conducts government banking function on behalf of SBP, which includes making government payments and receiving government receipts (such as cheques, challans etc.). The purpose of this transaction is to allow the Chests Vault to issue banknotes for facilitating government payments. The following fields shall be required for the purpose:

- Category
- Denomination
- Number of Pieces
- Value- to be auto calculated by the system

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

viii. Receive Balances from Counter

At day end, the government-banking counter shall deposit the banknotes left after completing the days' operations to the vault. For the purpose, the following fields shall be included in the system:

- Category
- Denomination
- Number of Pieces
- Value- to be auto calculated by the system
-

Security Level:

The transaction shall have Level 0; i.e. no authorization shall be required.

ix. Vault Management

The primary objective of this module is to uphold a comprehensive record of balance holdings within the Chests vaults, categorized by date of receipt, bank and specific categories. Every instance of deposit and withdrawal will be recorded within the system. Consequently, the module will continually reflect the current balance status. This ensures that an accurate snapshot of the balance within the Chests vaults is readily available.

To achieve this, the following key details are required:

- Bin Number: A unique identification number assigned to each storage bin within the vault.
- Date of Deposit of Balance: The date when the balance was initially deposited in the vault.
- Category of Balance: Classification of the balance into predefined categories, facilitating streamlined organization.
- Denomination
- Quantity
- Value: An auto-calculated metric generated by the system, representing the total value of the currency units within the bin.

x. Remittance Dispatch

This menu shall be used for dispatching remittance comprising of Reissue, unsorted, soiled, machine reject (or any other category defined later on) to SBP BSC offices and Chests.

For this purpose, the originating entry shall be generated by the dispatching entity in the system. For creation of consignment, following steps shall be carried out:

a. Scan QR codes of the logistic units (cash trays, boxes, pallets) and make part of the consignment. Entire data of the logistic units shall be retrieved by the system and captured. Moreover, following fields shall be populated by the system based on data retrieved:
   - Denomination
   - Number of pieces
   - Value (to be auto calculated by the system)
   - Logistic Unit Number(s)
   - Number of logistic units
   - Date of consignment dispatch

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Credit	Debit
Chest Notes Account	Currency Account

xi. Cancel Remittance

This transaction shall enable user to cancel a dispatched remittance in the event a dispatched remittance returns without being received at the destination.
For this purpose, user shall input the consignment number and scan the QR Codes of logistic units to verify that there are no missing items.
This shall serve as a reversal of the corresponding transaction of remittance dispatch.

Input Fields:

- Consignment Number
- Number of pieces – Auto-calculated by system
- Number of boxes/logistic units – Auto-calculated by system
- Number of pallets – Auto-calculated by system
- Box/Logistic Unit Number (to and from)
- Pallet Number (to and from)
- To Safe
- Value of the transferred balance (to be matched with the initial value inputted by user and auto calculated by the system)

Security Level:
The transaction shall have Level 1 Authorization i.e. 1 inputter and 1 authorizer

Accounting Entry:

Credit	Debit
Currency Account	Chest Notes Account

xii. Remittance Receipt

This menu shall be used for receipt of remittances of any categories from SBP BSC offices or other Chests.

For this purpose, the dispatching SBP BSC Office shall generate the originating entry in the system. Upon arrival of remittance at the receiving chest, user(s) shall:

a. Scan QR codes of the Logistic Units received in the consignment whereupon entire data of the contents of Logistic Units shall be retrieved by the system and captured.

   At this point, system shall match the scanned QR codes against those included in the consignment to carry out automated reconciliation. In case reconciliation is not achieved, system shall allow user(s) to carry out examination of balance in order to determine discrepancies.

   Security Level:
   The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

b. Receive Remittance in the system through a responding entry whereupon the contents of the captured consignment shall be taken into inventory of the receiving office.

   This shall be possible only if:
   i. Reconciliation is achieved at Capture Consignment stage
   ii. Balance has been examined through examination hall and discrepancies have been adjusted accordingly.

   Security Level:
   The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Accounting Entry:

Credit	Debit
Chest Notes Account	Currency Account

xiii. Chests Reporting:

The purpose of this module is to record all deposit and withdrawal transactions undertaken by Chests and maintain record of denomination and category wise balance position of Chest. The two statements used for reporting and their purpose are as follows:

- T-E 2
- F-157

The following information shall be required for TE-2 statement:

- Opening Balance- In value
- Total Deposits- In value
- Total Withdrawals- In Value
- Closing Balance – In Value
- Category of Banknotes
- Denomination
- Pieces
- Value of Banknotes
- Denomination of Coins
- Pieces of Coins
- Total Value of Coins
- Total Value of Banknotes and Coins– Total value to be matched with closing balance

The following information shall be required for F-157 statement:

- Date of Transaction-
- Total Deposits- Banknotes
- Total Withdrawals- Banknotes
- Total Deposits- Coins (Denom-wise)
- Total Withdrawals- Coins (Denom-wise)
- Total Deposits
- Total Withdrawals
- Net Withdrawals (Voucher Dr/Cr)

The value of net of deposits and withdrawals in F-157 shall match with the net of total deposits and withdrawals in TE-2.

All information in the chest reports shall automatically be uploaded in the Currency Accounting Module.

j. Commercial Banks

The purpose of this menu is to store banknote inventory data, receive requests from Main Branches of Commercial Banks and maintenance of their current accounts held with SBP BSC Offices through integration with T-24- Banking.

There are over 16,000 branches of commercial banks across Pakistan who provide banking services to the general public. The deposit and withdrawal of various categories of banknotes from these bank branches is undertaken through their Main Branches in the respective city either directly with 16 offices of SBP BSC, or with 224 Chests/ Sub Chests.

Only designated users of the main branch of the commercial bank shall be allowed access to the system via internet. There shall be at least 2 designated users of each banks' main branch/ CPC dealing with offices of SBP BSC and/ or Chest in each district, with one being prime user and the second user being the back-up. Tentative count of total users shall be around 1,600 to 2,000 users.

Process Description:

This menu shall perform the following functions:

- User Management for each bank
- Generation of QR codes for various categories of banknotes packed in cash trays.
- Request for Deposit of Balances with SBP BSC / Chest
- Request for Withdrawal/ Issuance of Balances from SBP BSC/ Chest
- Receive defective notes from customers and dispatch the same to SBP BSC offices in consignments.
- Reporting of discrepancies (if any) found in the received balances
- Workflow for discrepancies resolution
- Deposit of Counterfeits
- Branch and Category Wise Data of Balances Held with the Commercial Bank.

The processes are further elaborated under respective headings:

i. Generate QR Codes:

This menu shall exclusively be used by Commercial Banks for generation of QR codes, which shall be pasted on the cash trays.
QR codes for various categories of banknotes shall be generated by main branch/ CPC of the commercial bank before deposit of the same at SBP BSC Office or Chest.
The following information shall be included in the QR codes"

- Category of Banknotes
- Denomination
- Generation
- Quantity of Banknotes
- Bank Name
- Branch Code
- Serial number of seals against each tray (Each cash tray shall have a different seal)

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter and 1 authorizer.

Interface Requirement:

QR code Printer

ii. Request for Deposit of Balance

The purpose of this menu is to allow the commercial banks to raise request for deposit of various categories of balance with SBP BSC Offices or Chests. The transaction shall contain the following information:

- SBP BSC Office or Chest- Name/code of BSC Office or Chest to whom the balance is to be deposited.
- Category of Banknotes
- Denomination
- Quantity of Banknotes
- Value of Banknote- to be auto- calculated by the system
- Proposed Date of Deposit

Security Level:

The transaction shall be Level 0, i.e. no authorization shall be required.

iii. Accept/ Amend/ Reject Deposit Request:

The request for deposit of balances shall be routed to the Currency Management Unit at the respective SBP BSC office or the authorized user at Chest as the case may be. The transaction shall have the following functionalities:

- Allow the SBP BSC/ Chests Official to accept the request as it is, in which case the respective banks' main branch shall be intimated via the system and an approval code shall be generated against the request.
- Allow the SBP BSC/ Chests Official to amend the request by either adjusting the denomination, quantities or date of deposit of banknotes.
- Maintain log of change in request.
- Allow the SBP BSC/ Chests user to reject the request, in which case the process shall be terminated.

The transaction shall have the following fields, which may be adjustable in case of amendment in request.

- Denomination
- Quantity of Banknotes
- Date of Deposit
- One Time Password (Auto-generated by the system upon committing transaction and only visible to the requesting Commercial Bank, for acknowledgement purposes only)

Security Level:

The transaction shall be Level 0, i.e. no authorization shall be required.

iv. Create and Dispatch Consignment

The purpose of this transaction is to allow the commercial banks' users to create banknote consignment by scanning the QR codes on the cash trays. The transaction shall have the following functionalities:

- Create unique consignment ID for each transaction
- Auto populate the denomination and quantities of banknotes through data retrieved from QR code reader.
- Auto calculate the total value of the consignment.
- Allow user to add details of CiT and bank representatives

The following fields shall be included in the version:

- Category of banknotes- auto populated through QR code scanning
- Denomination- auto populated through QR code scanning
- Quantity of banknotes- auto populated through QR code scanning
- Value- auto calculated by system
- Name of Bank Representative (Optional and to be manually entered by the user)
- Details of CiT Company (Optional and to be manually entered by the user)

The system shall also allow the user to cancel remittance, in case of exigency, which shall be treated as a reversal of transaction. However, log of the same shall be maintained in the system.

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Interface Requirement:

QR code Scanner

v. Inputting Cases of Defective/Claim Notes Processing

This menu shall be used for receipt of defective notes from customers over the counter by commercial banks, for onwards submission to the SBP BSC Office (only) this menu will be used to enter following information:

- Denomination and pieces (list of denomination of all notes; to be entered as per received case)
- Amount (auto-calculated by the system)
- Claim date (auto-populated by the system based on system date)
- Claim No. (auto-populated by the system based on system sequence)
- Name of applicant
- IBAN
- CNIC Number
- Contact Number
- Condition of Notes (selection of multiple items based on defects in the notes)

The system generated claim number will be used moving forward for processing of the case. System should have the capacity to fetch all information related to claim number whenever used in the system. Commercial bank should also be able to print lodged claims for any record/correspondence.

Security Level:

This transaction will have Level 1 authorization i.e. 1 inputter, 1 authorizer.

vi. Request for Withdrawal/Issuance of Balance

The purpose of the module is to allow the commercial bank to raise request for issuance of banknotes from SBP BSC Office and/or Chest. The request may either be fulfilled through fresh and/or reissue banknotes or from the banks own deposited balance. The transaction shall have the following functionalities:

a. Create unique request ID for each transaction;
b. Allow users to request for issuance/ withdrawal of banknotes;

The following fields shall be included in the version:

- Name of the BSC Office/ Chest from which the request for balance issuance/ withdrawal is made;
- Denomination-to be entered by the user
- Quantity of banknotes- to be entered by the user
- Value- to be auto calculated by system
- Date of Withdrawal

Security Level:

The transaction shall be Level 0, i.e. no authorization shall be required.

vii. Accept/ Amend/ Reject Withdrawal Request:

The request for withdrawal of balances shall be routed to the Currency Management Unit at the respective SBP BSC office or the authorized user at Chest as the case may be. The transaction shall have the following functionalities:

- Allow the SBP BSC/ Chests Official to accept the request as it is, in which case the respective banks' main branch shall be intimated via the system.
- Allow the SBP BSC/ Chests Official to amend the request by either adjusting the denomination, quantities or date of withdrawal of banknotes, in which case the amended request shall automatically be updated against the request ID.
- Maintain log of change in request.
- Allow the SBP BSC/Chest user to reject the request, in which case the process shall be terminated.

The transaction shall have the following fields, which may be adjustable in case of amendment in request.

- Denomination
- Quantity of Banknotes
- Date of Withdrawal

Security Level:

The transaction shall be Level 1, i.e. level 1 authorization shall be required.

viii. Initiate Payment for Withdrawal:

The purpose of this transaction is to initiate payment by commercial bank for receipt of banknotes.

Once the SBP BSC/ Chest user has approved the request for withdrawal of balance, the commercial banks' user shall initiate payment request via either RTGS/ATS or RAAST. The transaction shall have the following functionalities:

- Allow bank to initiate request for payment against request ID;
- Concerned Commercial Bank executes transfer of funds via RTGS/ATS (transfer of funds done in RTGS/ATS) while making reference to the accepted Request ID;
- During RTGS/ATS transfer user shall mention the purpose, Request ID, and issuing office in the RTGS/ATS message
- RTGS/ATS transaction along with message imported to the system
- System automatically detects the Request ID & amount in RTGS/ATS transaction message and matches the amount mentioned in RTGS/ATS transaction ID against the corresponding Request ID.
- In case of matched status, system allows issuance of funds.
- The transaction shall have the following fields:
- Request ID- To be entered by user
- Approval Code- To be entered by user
- Denomination- Auto populated against the "Approval Code"
- Quantity of Banknotes- Auto populated against the "Approval Code"
- Category of Banknotes- Auto populated against the "Approval Code"
- Value of Banknote- to be auto- calculated by the system
- Date of Withdrawal- Auto populated against the "Approval Code"
- Name of Bank Representative (Optional)- name of bank representative who will receive the balance
- Details of CiT Company (Optional)- Details of CiT Company

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Interface Requirement:

Integration with RTGS/ATS / RAAST through T-24 Banking

Note: The system should also allow option for payment of funds through cheque.

Accounting Entry:

Credit	Debit
BSC Bank Payment Account	RTGS/ATS Transaction from Commercial Bank

ix. Report Discrepancy:

The purpose of this Input is to allow the commercial bank user to report any discrepancy found in balances received through Interbank Exchange of Cash, SBP BSC Office or Chest. Once the discrepancy is reported, the system shall keep track of the same until it is resolved. The following types of discrepancies may be found in the balances received from the various sources, which shall be available in the drop down menu for the user

- Difference in quantity of balance (shortage/ excess)
- Counterfeit Notes
- Irregularities observed in packing of balances
- Defective/Mismatched Notes
- Misprinted Notes

The transaction will have the following information:

- Reference Request/ Consignment ID- to be entered by the user
- Source of Balance- The system shall have a drop down which shall include IEC, SBP BSC Office, Chest as options
- Type of Discrepancy- The drop down shall contain the list of discrepancies as mentioned above.
- Denomination- User shall mention the denomination through a drop-down menu
- Number of Discrepant Pieces- User shall manually enter the number of pieces
- Value- The value shall automatically be calculated by the system
- Date of Detection- User shall mention the date of detection of balance
- Narrative: The field shall allow the user to mention any additional details in about 400 characters

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Upon committing the transaction, an intimation in the form of pop up shall be sent to the respective entities and the SBP BSC office for information.

x. Deposit Counterfeit Notes:

The commercial banks are required to deposit any counterfeit notes found during processing of banknotes to respective SBP BSC Office within 48 hours of detection of the same. The purpose of this transaction is to allow the commercial banks to initiate request for deposit of counterfeit notes.

The transaction shall have the following information:

- Date of Detection:
- Denomination:
- Number of Pieces:
- Generation:
- Place of Detection: The system shall allow user to choose from a drop down list “CPC” or “Branch”;
- Branch/ CPC Code Where Detected: Max 5 characters
- Consignment ID: Auto generated by the system

Security Level:

The transaction shall be Level 0, i.e. no authorization shall be required.

xi. Branch Wise Data of Balances Held:

The purpose of this transaction is to report branch wise data of balances held in commercial banks as per various banknote categories. The main branch/ head office of the respective banks shall upload data of branch wise balances on a pre-defined time basis onto the system. At the back end, each branch shall be mapped to pre-

defined districts in the system, to allow the system to generate reports and allow filtering at the district level.

The following functionalities shall be required in the version:

- Provide an upload utility for entering branch and category wise data of balance closing position.
- Map each branch (through its branch code) within the system to geographical districts pre-defined in the system.
- Generate reports based on branch-wise balances and districts.
- Enable filtering and sorting of data at the district level.
- Validate uploaded data for accuracy and consistency.

The transaction shall have the following information:

- Bank Name: Pre defined in system based on login credentials.
- Branch Code:
- Category:
- Denomination:
- Number of Pieces:
- Value: to be auto calculated by the system
- Generation

Security Level:

The transaction shall be Level 0, i.e. no authorization shall be required.

xii. Add Branch Details:

The purpose of the transaction is to allow the commercial bank to record data of all its branches for mapping against pre-defined districts. This data shall only be updated when there is an addition/ deletion of branch. The recording of data should be through an upload utility. The transaction shall have the following functionalities:

- Allow commercial banks to record data for all their branches, in alignment with pre-defined districts.
- Provide an upload utility for banks to input and submit branch data.
- Support the addition and deletion of branches through this utility.
- Enable mapping of each branch to pre-defined districts.
- Implement validation checks during data upload to ensure accuracy and integrity.
- Maintain historical records of branch data changes.

The transaction shall have the following data fields:

- Branch Code: A unique identifier for each branch.
- Branch Name:
- District: The pre-defined district to which the branch is mapped.
- Last Updated by: Name of the user or system account that last updated the branch data. This should be auto recorded by the system through login credentials.
- Upload Timestamps: The date and time when the branch data was last updated.

Security Level:

The transaction shall be Level 0, i.e. no authorization shall be required.

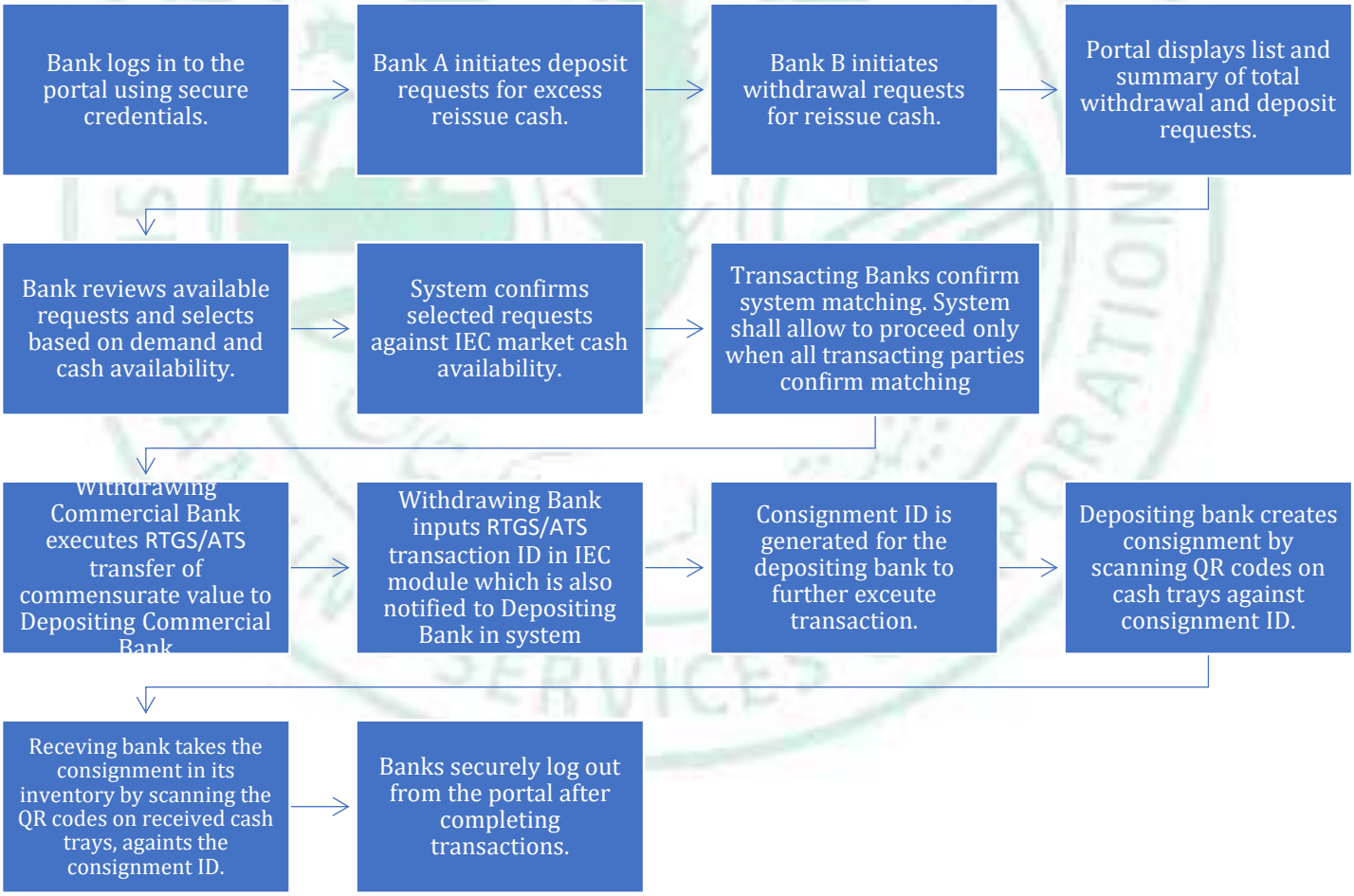
k. Interbank Exchange of Cash (IEC) Platform for Reissue Banknotes

The Interbank Exchange of Cash (IEC) Platform is an online system enabling banks to request reissue banknote deposits and withdrawals. It automates settlements between banks for matched requests, either from single or multiple entities and seamlessly involves SBP BSC or Chest if no market match is found, ensuring efficient availability of cash. This system enhances efficiency, transparency, and collaboration in interbank cash exchange for reissue banknotes.

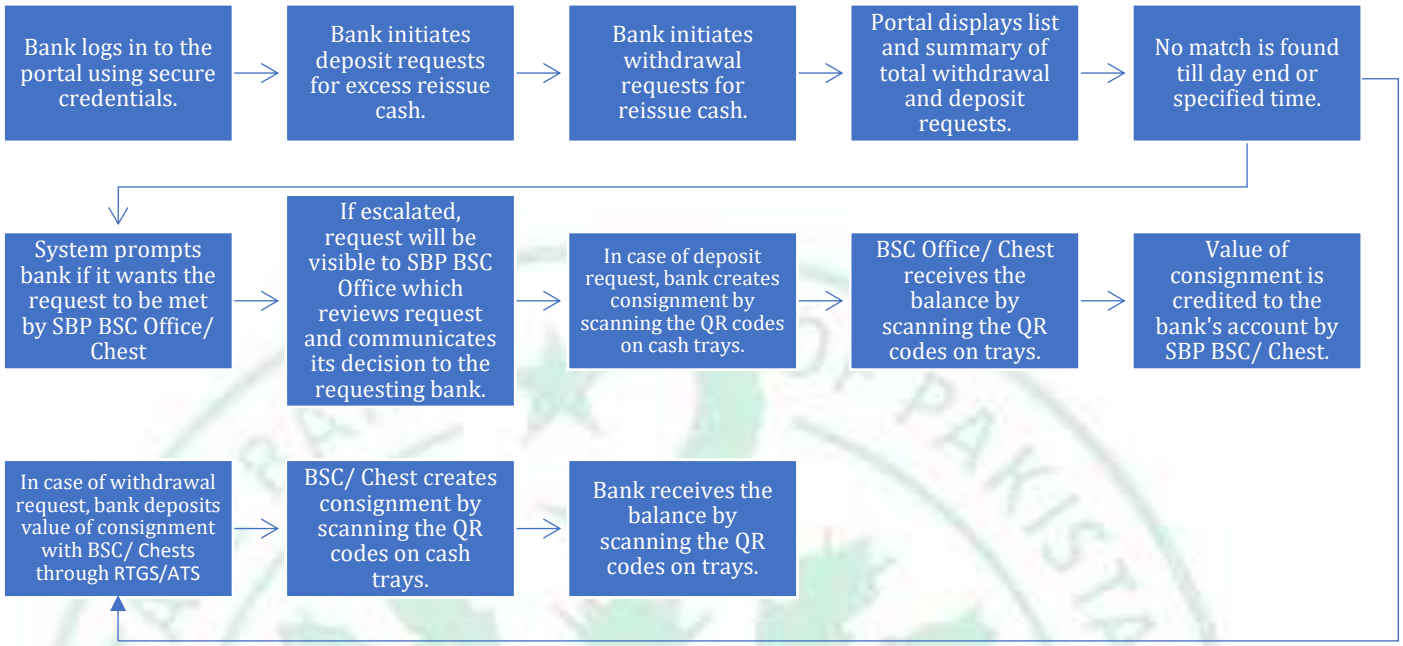
The system shall allow banks to initiate request for deposit or withdrawal either on the same or next working day.

Process Diagram:

Deposit/ Withdrawal Requests Matched During the Day- Process Flow:



Deposit/ Withdrawal Requests Escalated to SBP BSC/ Chest- Process Flow:



The menu shall have the following functionalities:

- Allow users to initiate request for deposit of reissue banknotes;
- Allow users to initiate request for receipt of reissue banknotes;
- For deposit of soiled notes, system shall allow banks to only select SBP BSC / Chest Branches.
- Display available deposit and receipt requests on the online IEC portal, with filtering capabilities;
- Display details of "Fulfilled" and "Unfulfilled" requests on the user dashboard, as per user access rights;
- Allow users to accept, amend and reject available matching requests;
- System shall allow further processing only when all banks involved in a transaction confirm matching in the system.
- Consequent to confirmation of successful matching by transacting banks, allow user(s) of withdrawing bank(s) to input RTGS/ATS transaction reference number; this reference number shall be used by depositing bank to confirm receipt of funds prior to consignment creation.
- Allow banks the option to divert unmatched requests to the respective SBP BSC Office or Chest with which the commercial banks' main branch is linked.
- Generate IEC Consignment code for dispatch of consignment.
- Allow users to report discrepancies found in the balance
- Successful exchanges are recorded for auditing purposes.
- Portal generates reports summarizing transaction activity and exchanges.
- Banks receive notifications at various stages of the process.
- Banks can communicate with each other through the portal.
- Commercial Banks shall have the functionality to withdraw their requests, if unattended. However, once matching is confirmed by both transacting banks, bank shall not be allowed withdraw request.

Process Description:
The menu shall have the following versions:

i. Request for Deposit/withdrawal of Reissue Balances in Interbank

The purpose of this menu is to allow the commercial banks to raise request for issuance/withdrawal of reissue balances on the IEC portal. The transaction shall contain the following information:

- Request Type (drop down: Deposit/Withdrawal)
- Denomination -to be entered by the user
- Quantity of Banknotes -to be entered by the user
- Value of Banknote- to be auto- calculated by the system
- Request ID (automatically generated by the system sequentially)
  Commercial Banks shall have the functionality to withdraw their requests, if unattended. However, once matching is confirmed, bank cannot withdraw request.

Security Level:

The transaction shall be Level 0, i.e. no authorization shall be required for the printing of QR codes.

ii. View Available Requests:

The purpose of this dashboard is to allow banks to view the various requests for deposit or withdrawal available in the IEC market.

The following functionalities shall be available in the system:

- Allow users to view details of requests by transaction type i.e. deposit and withdrawal.
- Allow users to accept requests without/with modification from single/multiple sources;
- Allow initiating user to reject requests available to them.
- Creation of consignment in the system for dispatch to receiving entity.
- Cancel a consignment in which case the issuing bank shall be auto-debited and receiving bank shall be credit against the total consignment value.
- Commercial Banks shall have the functionality to withdraw their requests, if unattended. However, once matching is confirmed, bank cannot withdraw request

In case the user chooses to amend request, the following fields shall be displayed which may be adjustable.

- Denomination
- Quantity of Banknotes
- Value – to be auto calculated by the system
- Date of Deposit

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

iii. Interbank Settlement

Interbank settlement shall be carried out via RTGS/ATS transfers between the transaction banks outside the system. In chronological order of process, both transacting banks shall confirm successful matching following which system shall prompt the withdrawing bank to input RTGS/ATS transaction reference number and amount transferred to the depositing bank.

Accordingly, the depositing bank shall then verify the receipt of funds in system by validating the particulars entered by withdrawing bank. Subsequently, system shall allow the depositing bank to proceed with consignment creation (next step).

iv. Create Consignment

The purpose of this transaction is to allow the commercial banks' users to create banknote consignment by scanning the QR codes on the cash trays. The transaction shall have the following functionalities:

- Create unique consignment ID for each transaction
- Enter value of notes to be sent
- Auto populate the denomination and quantities of banknotes through data retrieved from QR code reader.
- Auto calculate the total value of the consignment, and validate against the required value as inputted by user
- Allow user to add details of CiT and bank representatives

The following fields shall be included in the version:

- IEC Request ID- To be entered by user
- Consignment ID- Auto generated by system
- Category of banknotes- auto populated through QR code scanning
- Denomination- auto populated through QR code scanning
- Quantity of banknotes- auto populated through QR code scanning
- Value- auto calculated by system
- Name and CNIC of Bank Representative (Optional)
- Details of CiT Company (Optional)

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

Interface Requirement:

QR code Scanner

v. Dispatch Consignment:

The purpose of the transaction is to allow dispatch of consignment,

vi. Report Discrepancy:

The purpose of this transaction is to allow the commercial bank user to report any discrepancy found in balances received through Interbank Exchange of Cash. Once the discrepancy is reported, the system shall keep track of the same until it is resolved. The following types of discrepancies may be found in the balances received:

- Difference in quantity of balance (shortage/ excess)
- Counterfeit Notes

- Irregularities observed in packing of balances
- Defective/Mismatched Notes

The transaction will have the following information:

- Reference Consignment ID- to be entered by the user
- Source of Balance- Bank Name
- Category of Balance Received:
- Type of Discrepancy- The drop down shall contain the list of discrepancies as mentioned above.
- Denomination- User shall mention the denomination through a drop-down menu
- Number of Discrepant Pieces- User shall manually enter the number of pieces
- Value- The value shall automatically be calculated by the system
- Date of Detection- User shall mention the date of detection of balance
- Narrative: The field shall allow the user to mention any additional details in about 400 characters
-

Security Level:

The transaction shall have Level 1 Authorization i.e. 1 inputter, 1 authorizer.

vii. View Discrepancy:

A system based prompt shall be sent to the balance-sending bank regarding the discrepancy found in balances. The resolution of the discrepancy shall be conducted offline. However, the discrepant bank shall enter the details when the discrepancy was resolved in the following version:

- Status: Resolved
- Date of Resolution
- Action Taken (Narrative- Max 400 characters)

Report in respect of "Pending" cases shall be visible to SBP BSC Officials and the respective banks.

l. Report Builder

This utility shall be used for creating various reports based on Wizard-based selection criteria created by the user(s) and data available at back-end.

Requirement Description:

- Prompt user(s) to select the fields against which data is to be retrieved from system.
- Prompt user(s) to set input parameters as reference for data presentation.
- Fetch data from back-end database as per selected fields and input parameters.
- Present data as output in various forms such as graphical, excel based, tabular etc.

The functionalities are further elaborated under respective headings:

- Selection of Fields
  The user shall select the required fields from a list of values available in this system. e.g. Organization, Department, Transaction Category, Denom against which data is available in the database.

- Setting input parameters
  Here the user shall set the input parameters that would be required to run the report. These could be "From date", "To date" (Value Date and Transaction Date), "User ID", or any other parameter required by the user(s).

- Fetching data from back-end
  Once the report is executed, it will fetch the required data from database.

- Graphical and tabular representation of data
  The output of the report shall be categorized as follows (per user requirement):
  - Graphical
  - Excel
  - PDF
  - Tabulated

m. Management Dashboard

This utility shall be used for creating various dashboards and auto alerts based on selection criteria created by the user(s) and data available at back-end. The System should have a flexible reporting engine which can generate both operational reports as well as ad-hoc MIS reports required by various stake holders.

The reporting engine should have a report designer which allow definition of reports through a GUI which will be used by the operator. Access control mechanism should be part of the reporting module to allow only specific users to generate the reports. The reporting engine should provide end users with a front end, so they can generate all the pre-built reports to which the user has access.

n. Close of Business and End of Day Operations

This menu shall be used for raising Close of Business signal marking the end of operations in offices. The concerned SPU officials at respective offices/sites shall raise the COB signal.

Prior to COB signal, each BSC office except Karachi shall execute an entry for credit or debit voucher. These transactions shall be originating entries and automatically generated by the system upon being prompted by the user through process execution.

Credit Voucher shall be executed when the payments/withdrawal are higher than the receipts/deposits. Therefore, the system shall execute an entry for Credit Voucher whereupon it shall debit the respective office's liability account by the net differential amount (i.e. total cash deposits/receipts minus total cash payments/withdrawals) whereas Voucher Account shall be credited by the same amount as a contra-entry.

Debit Voucher shall be executed by an office when the Receipts/Deposits are higher than the payments/withdrawal. Therefore, the office shall execute an entry for Debit Voucher whereupon it shall credit its liability account by the net differential amount (i.e. total cash deposits/receipts minus total cash payments/withdrawals) whereas Voucher Account shall be debited by the same amount as a contra-entry.

Accounting Entry:
If Receipts/Deposits higher than Payments/Withdrawals:
Debit: Liability Account CBA PKR100020005
Credit: Liability Contra Account

If Payments/Withdrawals higher than Deposits/Receipts:
Debit: Liability Contra Account
Credit: Liability Account CBA PKR100020005

The net position of the Liability Contra Account (Centralized Account) shall determine whether there has been an overall currency expansion (credit) or contraction (debit). Accordingly, the system shall generate the transaction for user at KO who shall commit transaction for Currency Contraction/Expansion as under:

Accounting Entry:
Currency Contraction (Liability Contra Account in Net Credit i.e. Net deposits at BSC offices):
Debit: Liability Contra Account
Credit: Circulation Account

Currency Expansion (Liability Contra Account in Net Debit i.e. Net payments at BSC offices):
Credit: Liability Contra Account
Debit: Circulation Account

In accordance with above expansion/contraction, transaction shall be affected on value account to accordingly increase/decrease the assets in Value Account.

Banking Vault Movements

Banking Vault is essentially a sub-account of Circulation. The amount of transfer into/out of the banking vault is based on rounding off factor introduced at the time of Currency Contraction/Expansion transaction.

The remaining amount in Contra Liability Account (+ive or –ive) is moved via entry (Credit/Debit) to the Banking Vault. The entries shall be as under depending on scenario A or B:

Scenario A (After Expansion/Contraction, Contra Account is in net Credit):

Step 1	Debit: Exchange Account – Banking Box Credit: Exchange Account – Exchange Vault
Step 2	Debit: Contra Liability Account Credit: Exchange Account – Banking Box

Scenario B (After Expansion/Contraction, Contra Account is in net Debit):

Step 1	Debit: Exchange Account – Exchange Vault Credit: Contra Liability Account

Once COB signals have been generated by all offices/sites, the System / Administrator user shall execute an End of Day routine to end the current date in system and start new date.
The COB menu shall include various parametrized processes, services, reports and checks (daily, monthly, Quarterly and Yearly), which shall provide User and System with critical information including but not limited to the following:

- Vault Safe Matching – Vault-wise
- Examination Hall Matching – i.e. Banknotes sent to examination hall matched banknotes taken out from examination hall
- Unauthorized entries
- Non-zero Till Balance
- Unreconciled accounting entries
- Accounts with non-zero balance

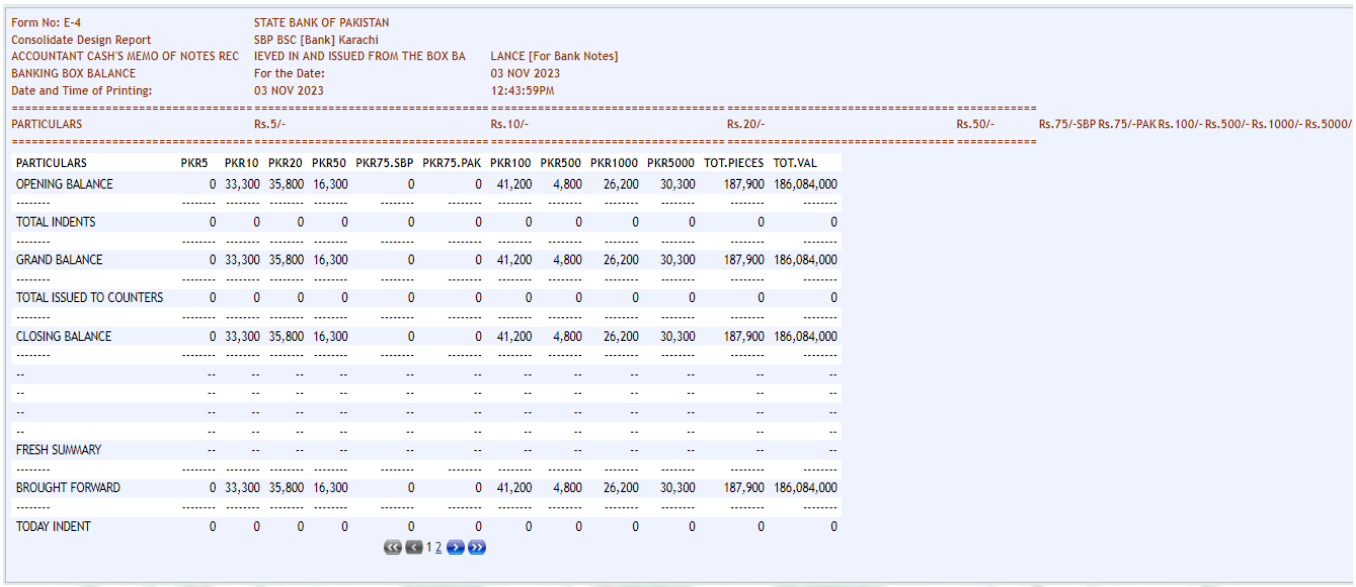
System must have provision for allowing user to add additional checks as deemed necessary.

o. Date Management

This module shall be used for date management of the system where user shall define working days, Weekends, Month-ends, Year-End and Holidays in the system.

p. System Reports

i. Simple Reports:



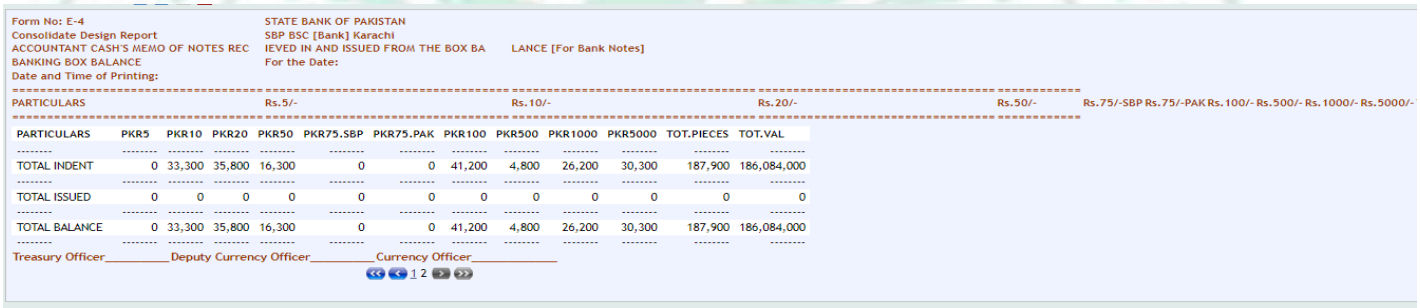
Form No: E-4 STATE BANK OF PAKISTAN
Consolidate Design Report SBP BSC [Bank] Karachi
ACCOUNTANT CASH'S MEMO OF NOTES REC IEVED IN AND ISSUED FROM THE BOX BA LANCE [For Bank Notes]
BANKING BOX BALANCE For the Date: 03 NOV 2023
Date and Time of Printing: 03 NOV 2023 12:43:59PM

PARTICULARS	Rs.5/-				Rs.10/-				Rs.20/-			Rs.50/-	Rs.75/-SBP	Rs.75/-PAK	Rs.100/-	Rs.500/-	Rs.1000/-	Rs.5000/

PARTICULARS	PKR5	PKR10	PKR20	PKR50	PKR75.SBP	PKR75.PAK	PKR100	PKR500	PKR1000	PKR5000	TOT.PIECES	TOT.VAL
OPENING BALANCE	0	33,300	35,800	16,300	0	0	41,200	4,800	26,200	30,300	187,900	186,084,000
TOTAL INDENTS	0	0	0	0	0	0	0	0	0	0	0	0
GRAND BALANCE	0	33,300	35,800	16,300	0	0	41,200	4,800	26,200	30,300	187,900	186,084,000
TOTAL ISSUED TO COUNTERS	0	0	0	0	0	0	0	0	0	0	0	0
CLOSING BALANCE	0	33,300	35,800	16,300	0	0	41,200	4,800	26,200	30,300	187,900	186,084,000
FRESH SUMMARY	--	--	--	--	--	--	--	--	--	--	--	--
BROUGHT FORWARD	0	33,300	35,800	16,300	0	0	41,200	4,800	26,200	30,300	187,900	186,084,000
TODAY INDENT	0	0	0	0	0	0	0	0	0	0	0	0

1 2

Figure 1 E-4 Page 1



Form No: E-4 STATE BANK OF PAKISTAN
Consolidate Design Report SBP BSC [Bank] Karachi
ACCOUNTANT CASH'S MEMO OF NOTES REC IEVED IN AND ISSUED FROM THE BOX BA LANCE [For Bank Notes]
BANKING BOX BALANCE For the Date:
Date and Time of Printing:

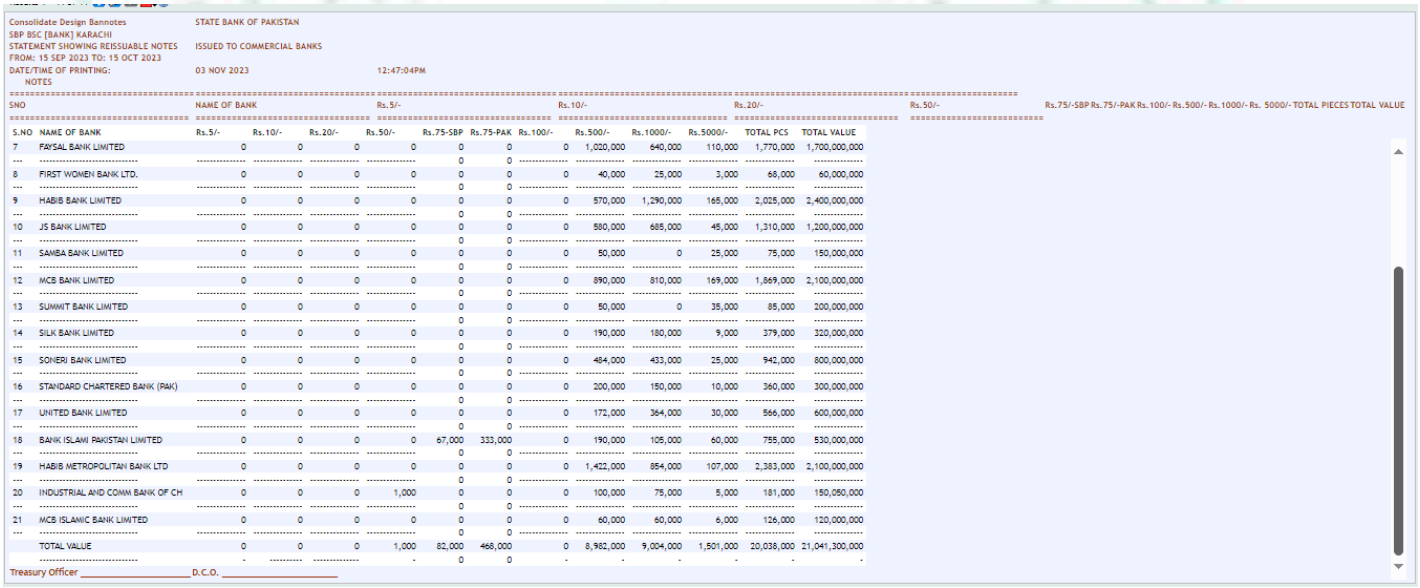
PARTICULARS	Rs.5/-				Rs.10/-				Rs.20/-			Rs.50/-	Rs.75/-SBP	Rs.75/-PAK	Rs.100/-	Rs.500/-	Rs.1000/-	Rs.5000/-

PARTICULARS	PKR5	PKR10	PKR20	PKR50	PKR75.SBP	PKR75.PAK	PKR100	PKR500	PKR1000	PKR5000	TOT.PIECES	TOT.VAL
TOTAL INDENT	0	33,300	35,800	16,300	0	0	41,200	4,800	26,200	30,300	187,900	186,084,000
TOTAL ISSUED	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL BALANCE	0	33,300	35,800	16,300	0	0	41,200	4,800	26,200	30,300	187,900	186,084,000

Treasury Officer_____Deputy Currency Officer_____Currency Officer_____

1 2

Figure 2 E-4 Page 1

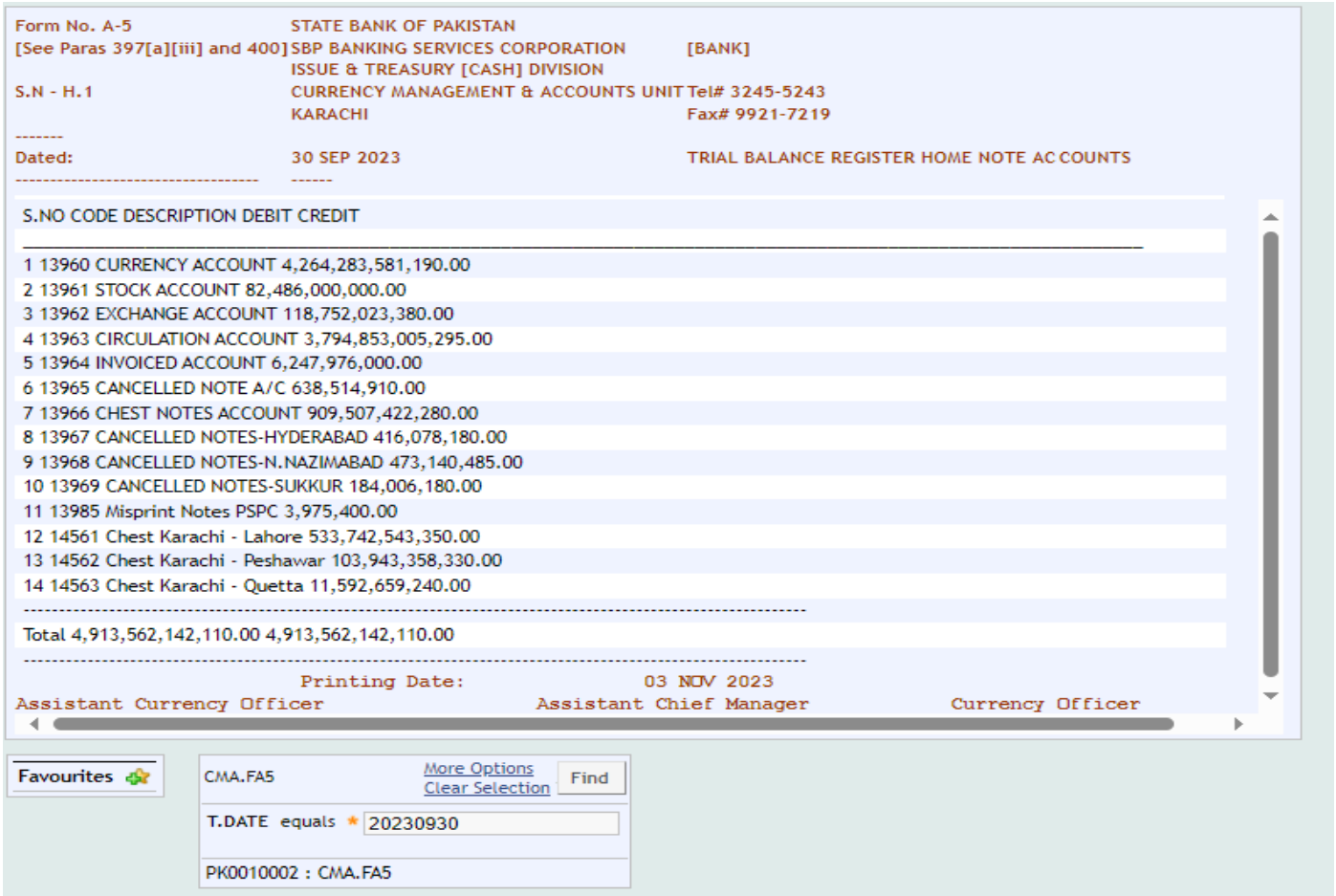


Consolidate Design Bannotes STATE BANK OF PAKISTAN
SBP BSC [BANK] KARACHI
STATEMENT SHOWING REISSUABLE NOTES ISSUED TO COMMERCIAL BANKS
FROM: 15 SEP 2023 TO: 15 OCT 2023
DATE/TIME OF PRINTING: 03 NOV 2023 12:47:04PM
NOTES

SNO	NAME OF BANK	Rs.5/-			Rs.10/-			Rs.20/-			Rs.50/-	Rs.75/-SBP	Rs.75/-PAK	Rs.100/-	Rs.500/-	Rs.1000/-	Rs. 5000/-	TOTAL PIECES	TOTAL VALUE
S.NO	NAME OF BANK	Rs.5/-	Rs.10/-	Rs.20/-	Rs.50/-	Rs.75-SBP	Rs.75-PAK	Rs.100/-	Rs.500/-	Rs.1000/-	Rs.5000/-	TOTAL PCS	TOTAL VALUE						
7	FAYSAL BANK LIMITED	0	0	0	0	0	0	0	1,020,000	640,000	110,000	1,770,000	1,700,000,000						
8	FIRST WOMEN BANK LTD.	0	0	0	0	0	0	0	40,000	25,000	3,000	68,000	60,000,000						
9	HABIB BANK LIMITED	0	0	0	0	0	0	0	570,000	1,290,000	165,000	2,025,000	2,400,000,000						
10	JS BANK LIMITED	0	0	0	0	0	0	0	580,000	685,000	45,000	1,310,000	1,200,000,000						
11	SAMBA BANK LIMITED	0	0	0	0	0	0	0	50,000	0	25,000	75,000	150,000,000						
12	MCB BANK LIMITED	0	0	0	0	0	0	0	890,000	810,000	169,000	1,869,000	2,100,000,000						
13	SUMMIT BANK LIMITED	0	0	0	0	0	0	0	50,000	0	35,000	85,000	200,000,000						
14	SILK BANK LIMITED	0	0	0	0	0	0	0	190,000	180,000	9,000	379,000	320,000,000						
15	SONERI BANK LIMITED	0	0	0	0	0	0	0	484,000	433,000	25,000	942,000	800,000,000						
16	STANDARD CHARTERED BANK (PAK)	0	0	0	0	0	0	0	200,000	150,000	10,000	360,000	300,000,000						
17	UNITED BANK LIMITED	0	0	0	0	0	0	0	172,000	364,000	30,000	566,000	600,000,000						
18	BANK ISLAMI PAKISTAN LIMITED	0	0	0	0	67,000	333,000	0	190,000	105,000	60,000	755,000	530,000,000						
19	HABIB METROPOLITAN BANK LTD	0	0	0	0	0	0	0	1,422,000	854,000	107,000	2,383,000	2,100,000,000						
20	INDUSTRIAL AND COMM BANK OF CH	0	0	0	1,000	0	0	0	100,000	75,000	5,000	181,000	150,050,000						
21	MCB ISLAMIC BANK LIMITED	0	0	0	0	0	0	0	60,000	60,000	6,000	126,000	120,000,000						
	TOTAL VALUE	0	0	0	1,000	82,000	468,000	0	8,982,000	9,004,000	1,501,000	20,038,000	21,041,300,000						

Treasury Officer _____D.C.O. _____

Figure 3 Issuance to Banks



Form No. A-5 STATE BANK OF PAKISTAN
[See Paras 397[a][iii] and 400] SBP BANKING SERVICES CORPORATION [BANK]
ISSUE & TREASURY [CASH] DIVISION
S.N - H.1 CURRENCY MANAGEMENT & ACCOUNTS UNIT Tel# 3245-5243
KARACHI Fax# 9921-7219

Dated: 30 SEP 2023 TRIAL BALANCE REGISTER HOME NOTE ACCOUNTS

S.NO	CODE	DESCRIPTION	DEBIT	CREDIT
1	13960	CURRENCY ACCOUNT	4,264,283,581,190.00	
2	13961	STOCK ACCOUNT	82,486,000,000.00	
3	13962	EXCHANGE ACCOUNT	118,752,023,380.00	
4	13963	CIRCULATION ACCOUNT	3,794,853,005,295.00	
5	13964	INVOICED ACCOUNT	6,247,976,000.00	
6	13965	CANCELLED NOTE A/C	638,514,910.00	
7	13966	CHEST NOTES ACCOUNT	909,507,422,280.00	
8	13967	CANCELLED NOTES-HYDERABAD	416,078,180.00	
9	13968	CANCELLED NOTES-N.NAZIMABAD	473,140,485.00	
10	13969	CANCELLED NOTES-SUKKUR	184,006,180.00	
11	13985	Misprint Notes PSPC	3,975,400.00	
12	14561	Chest Karachi - Lahore	533,742,543,350.00	
13	14562	Chest Karachi - Peshawar	103,943,358,330.00	
14	14563	Chest Karachi - Quetta	11,592,659,240.00	
Total			4,913,562,142,110.00	4,913,562,142,110.00

Printing Date: 03 NOV 2023
Assistant Currency Officer Assistant Chief Manager Currency Officer

Favourites
CMA.FA5 More Options Clear Selection Find
T.DATE equals * 20230930
PK0010002 : CMA.FA5

Figure 4 Trial Balance of Home Note Accounts

ii. Complex Reports

DAILY POSITION
Daily Position of Currency Notes
CONSOLIDATED DESIGN BANK NOTES
Particulars

STATE BANK OF PAKISTAN
Kept in Various Vaults of
SBP BSC[Bank]
KARACHI BRANCH ,as on: 03 NOV 2023

PARTICULARS	Rs.5/-	Rs.10/-	Rs.20/-	Rs.50/-	Rs.75-SBP	Rs.75-PAK	Rs.100/-	Rs.500/-	Rs.1000/-	Rs.5000/-	Total Pieces	Total Value
Opening Stock	0	35,250,600	22,160,800	64,994,600	556,000	250,000	56,051,300	10,484,900	38,276,500	15,857,300	243,882,000	132,516,482,000
Recieved from PSPC/Other Offices	0	0	0	0	0	0	0	0	0	0	0	0
Shortage Make Good	0	0	0	0	0	0	0	0	0	0	0	0
Issued to Counters	0	0	0	0	0	0	0	0	0	0	0	0
Issued to Banks	0	0	0	0	0	0	0	0	0	0	0	0
Remittance sent	0	0	0	0	0	0	0	0	0	0	0	0
Remittance Re-deposit	0	0	0	0	0	0	0	0	0	0	0	0
Shortage Found	0	0	0	0	0	0	0	0	0	0	0	0
Closing Balance	0	35,250,600	22,160,800	64,994,600	556,000	250,000	56,051,300	10,484,900	38,276,500	15,857,300	243,882,000	132,516,482,000
Number of Boxes	0	705	444	1,300	11	5	1,121	210	766	317	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
REISSUABLE IN EXCHANGE VAULT	0	34,681	48,280	8,280	7,000	119,000	77,703	5,280	58,380	35,320	393,924	256,566,710
REISSUABLE IN BOXES	0	0	0	0	0	0	0	0	0	0	0	0
FRESH NOTE VAULT (Examined/Unexamined)	0	17,200,000	12,050,000	49,450,000	0	0	29,750,000	3,650,000	15,900,000	12,050,000	140,050,000	83,835,500,000
	0	0	0	0	0	0	0	0	0	0	0	0
CURRENCY NOTES HELD IN BONDED VAULT	0	0	0	0	0	0	0	0	0	0	0	0
Re-Issueable	0	0	0	0	0	0	3,081,000	1,332,000	160,000	4,573,000	3,672,500,000	
Soiled	0	0	0	0	0	0	23,525,000	19,962,000	2,299,000	45,786,000	43,219,500,000	
Cut/Mutilated	0	0	0	0	0	0	0	0	0	0	0	
Mix Unsorted	0	0	0	0	0	0	2,930,000	1,874,000	413,000	5,217,000	5,404,000,000	
Total	0	0	0	0	0	0	29,536,000	23,168,000	2,872,000	55,576,000	52,296,000,000	
	0	0	0	0	0	0	0	0	0	0	0	0
BALANCES HELD IN CHEST VAULT	0	0	0	0	0	0	0	0	0	0	0	0
Mixed	0	0	0	0	0	0	2,289,000	890,026	82,000	3,261,026	2,444,526,000	
Soiled	0	0	0	0	0	0	7,896,000	7,672,974	421,000	15,989,974	13,725,974,000	
Cut	0	0	0	0	0	0	0	0	0	0	0	
Re-Issue	0	0	0	0	0	0	0	0	0	0	0	
Total	0	0	0	0	0	0	10,185,000	8,563,000	503,000	19,251,000	16,170,500,000	
	0	0	0	0	0	0	0	0	0	0	0	0
Cancelled Notes (Waiting FOR destructi	2,000	26,846	10,203	10,332	0	0	14,341	10,340	17,609	5,389	97,060	52,157,220
Re-Issuable Notes Available	0	34,681	48,280	8,280	7,000	119,000	77,703	3,086,280	1,390,380	195,320	4,966,924	3,929,066,710
	0	0	0	0	0	0	0	0	0	0	0	0
STOCK OF COINS	Re.1	1/-ALM	Rs.2	2/-ALM	0	0	Rs.5.0	Rs.5/-NEW	Rs.10/-NEW	0	0	0
Opening Balance	5,971.22	2,297,041	3,871	63,000	0	0	47,057	580,000	7,191,900	0	0	0
Received from Coin Box	0	0	0	0	0	0	0	0	0	0	0	0
Issue to Coin Box	0	12,000	0	3,000	0	0	0	20,000	900	0	0	0
Remittance Received	0	0	0	0	0	0	0	0	0	0	0	0
Remittance Issued	0	0	0	0	0	0	0	0	0	0	0	0
Closing Balance	5,971.22	2,285,041	3,871	60,000	0	0	47,057	560,000	7,191,000	0	0	0

Figure 5 Daily Stock Position

Consolidated Design Banknotes
[see Para -28,98,209,391,392,396,398
CONSOLIDATED DESIGN BANKNOTES
FOR THE DATE:
Date and Time of Printing:

STATE BANK OF PAKISTAN
,399,403]
DETAILS OF NOTES
11 OCT 2023
11 OCT 2023

SBP BSC [Bank] Karachi
06:42:06PM

PARTICULARS	PKR5	PKR10	PKR20	PKR50	PKR100	PKR500	PKR1000	PKR5000	PKR75.SBP	PKR75.PAK	TOT.PIECES	TOT.VAL
		Rs.5/-			Rs.10/-			Rs.20/-				Rs.50/-
OPENING BALANCE	0	14,796,923	11,516,480	10,537,550	27,135,433	36,683,949	39,030,607	6,767,319	3,285,600	1,634,300	151,388,161	95,196,888,630.00
FROM STOCK	0	8,000,000	0	6,000,000	0	0	12,000,000	0	0	0	26,000,000	12,380,000,000.00
FROM STOCK PSPC FRESH	0	0	0	0	0	100,000	600,000	150,000	400,000	0	1,250,000	1,430,000,000.00
RECEIPT	0	3,877	1,503	2,443	6,345	1,683,068	532,994	96,597	0	500	2,327,327	1,858,375,980.00
RE-ISSUABLE FROM CHEST	0	0	0	0	0	0	0	0	0	0	0	0.00
RE-ISSUABLE BPAS CHEST	0	0	0	0	0	0	0	0	0	0	0	0.00
CHEST RE-ISSUE WITHDRAWN	0	0	0	0	0	0	0	0	0	0	0	0.00
SUB TOTAL	0	8,003,877	1,503	6,002,443	6,345	1,783,068	13,132,994	246,597	400,000	500	29,577,327	15,668,375,980.00
ISSUANCE	0	0	0	0	0	0	0	0	0	0	0	0.00
	0	0	0	0	0	0	0	0	0	0	0	0.00
HOME NOTE ISSUED	0	247,125	58,000	36,970	28,565	21,969	114,227	7,099	732,200	568,300	1,814,455	266,580,250.00
HOME NOTE ISSUED PSPC	0	0	0	0	0	100,000	600,000	150,000	350,000	0	1,200,000	1,426,250,000.00
SUB TOTAL	0	247,125	58,000	36,970	28,565	121,969	714,227	157,099	1,082,200	568,300	3,014,455	1,692,830,250.00
CANCELLED NOTES	0	0	0	0	0	0	0	0	0	0	0	0.00
	0	0	0	0	0	0	0	0	0	0	0	0.00
BPAS PROCEDURE > BONDED	0	0	0	0	0	0	0	0	0	0	0	0.00
DEFACED COUNTER	0	2,021	1,203	405	750	364	441	267	0	0	5,451	2,097,520.00
NORMAL PROCEDURE	0	0	0	0	0	0	0	0	0	0	0	0.00
SPECIAL PROC./SVP/CNSDNS	0	0	0	0	0	0	0	0	0	0	0	0.00
SUB TOTAL	0	2,021	1,203	405	750	364	441	267	0	0	5,451	2,097,520.00
	0	0	0	0	0	0	0	0	0	0	0	0.00
CLOSING BALANCE	0	22,551,654	11,458,780	16,502,618	27,112,463	38,344,684	51,448,933	6,856,550	3,685,600	2,203,100	177,945,582	109,170,336,840.00
	0	0	0	0	0	0	0	0	0	0	0	0.00
CLOSING BALANCE (SAFE)	0	22,551,654	11,458,780	16,502,618	27,112,463	38,344,684	51,448,933	6,856,550	2,603,400	1,066,500	177,945,582	109,170,336,840.00

Figure 6 CD-25 Report

REPORT NAME: AC-9
STATE BANK OF PAKISTAN
(CURRENCY MANAGEMENT DIVISION)HOK DATE : 03 NOV 2023
TIME : 01:42:04PM
FINANCE DEPARTMENT
An account pursuant to the State Bank of Pakistan Act.1956, for the Week ended the 18 OCT 2023
ISSUE DEPARTMENT

LIABILITIES	Rs.		Rs.	ASSETS	Rs.	
LIAB	RS.1	RS.2	ASSETS	RS.3	RS.4	
Notes held in the	--	--	--	--	--	
Banking Department	150,516,155.62	--	I.A.Gold Coin and Bullion	1,118,947,344,042.00	0.00	
--	--	--	Silver Bullion	0.00	0.00	
Notes in Circulation	8,998,421,317,249.38	0.00	Special Drawing Rights held with	0.00	0.00	
--	--	--	the International Monetary Fund	0.02	0.00	
--	--	--	Conventional- securities purchased	--	--	
--	--	--	under agreement to resell	3,000,000,000,000.00	--	
Total Notes Issued	--	8,998,571,833,405.00	Approved Foreign Exchange	-2.86	0.00	
--	--	--	India notes representing assets	0.00	0.00	
--	--	--	receivable from the Reserve	0.00	0.00	
--	--	--	Bank of India	1,500,153,079.24	4,120,447,497,118.40	
--	--	--	B.Rupee Coin	202,081,899.63	--	
--	--	--	Government of Pakistan	--	--	
--	--	--	Securities	4,858,134,667,395.00	--	
--	--	--	Internal Bills of Exchange and	--	--	
--	--	--	Other Commercial Paper:-	--	--	
--	--	--	i) Agricultural	--	--	
--	--	--	Sector --	--	--	

Favourites AC-9 [HOK] More Options Clear Selection Find
DATE equals * 20231018
PK0010001 : CD.AC-9.VD.HOK

Figure 7 Statement of Affairs page 1

REPORT NAME: AC-9
STATE BANK OF PAKISTAN
(CURRENCY MANAGEMENT DIVISION)HOK DATE : 03 NOV 2023
TIME : 01:42:04PM
FINANCE DEPARTMENT
An account pursuant to the State Bank of Pakistan Act.1956, for the Week ended the 18 OCT 2023
ISSUE DEPARTMENT

LIABILITIES	Rs.		Rs.	ASSETS	Rs.	
LIAB	RS.1	RS.2	ASSETS	RS.3	RS.4	
--	--	--	iv) Housing Sector--	--	--	
--	--	--	v) Others --	0.00	4,858,336,749,294.63	
--	--	--	II. Held with the Reserve Bank of	--	--	
--	--	--	India pending transfer to	--	--	
--	--	--	Pakistan:-	--	--	
--	--	--	Gold Coin and Bullion	18,075,639,609.68	--	
--	--	--	Sterling Securities	1,203,363,240.89	--	
--	--	--	Government of India Securities	498,575,071.99	--	
--	--	--	Rupee Coin	10,009,067.65	19,787,586,990.21	
Total Liabilities	--	8,998,571,833,405.00	Total Assets	--	8,998,571,833,403.74	
--	--	--	--	--	--	
--	--	--	--	--	--	
--	--	--	--	--	--	
--	--	--	--	--	--	
Registered No.s-1096	--	--	Please also see the Statement of	0.00	--	
Dated the 03 NOV 2023--	--	--	Affairs of the Banking Department.	0.00	--	

Favourites AC-9 [HOK] More Options Clear Selection Find
DATE equals * 20231018
PK0010001 : CD.AC-9.VD.HOK

Figure 8 Statement of Affairs page 1

q. Data Migration / Conversion

This involves Take-on and Conversion of entire data including archive data from existing T24 Currency system to the new system before Go-Live including relevant reporting. The Bidder shall conduct the data conversion activity at Bank premises.

r. Dashboard and Reporting Requirements

Development of Reports and Dashboards as per the requirements. (To be provided by relevant team)

- Around 200 Complex Reports
- Around 300 Simple Reports
- Around 10 to 15 customizable dashboards

Reports formats must be printable on different printer formats including export option to PDF or .csv. Report formats will be provided to the bidders in soft form on request.

s. Accounting & Sub Ledger

System should be capable of managing accounting and Sub ledger in a configurable multi-book architecture (Each office should have its own balance books of SBP and SBPBSC offices.

t. Mapping of Account Heads

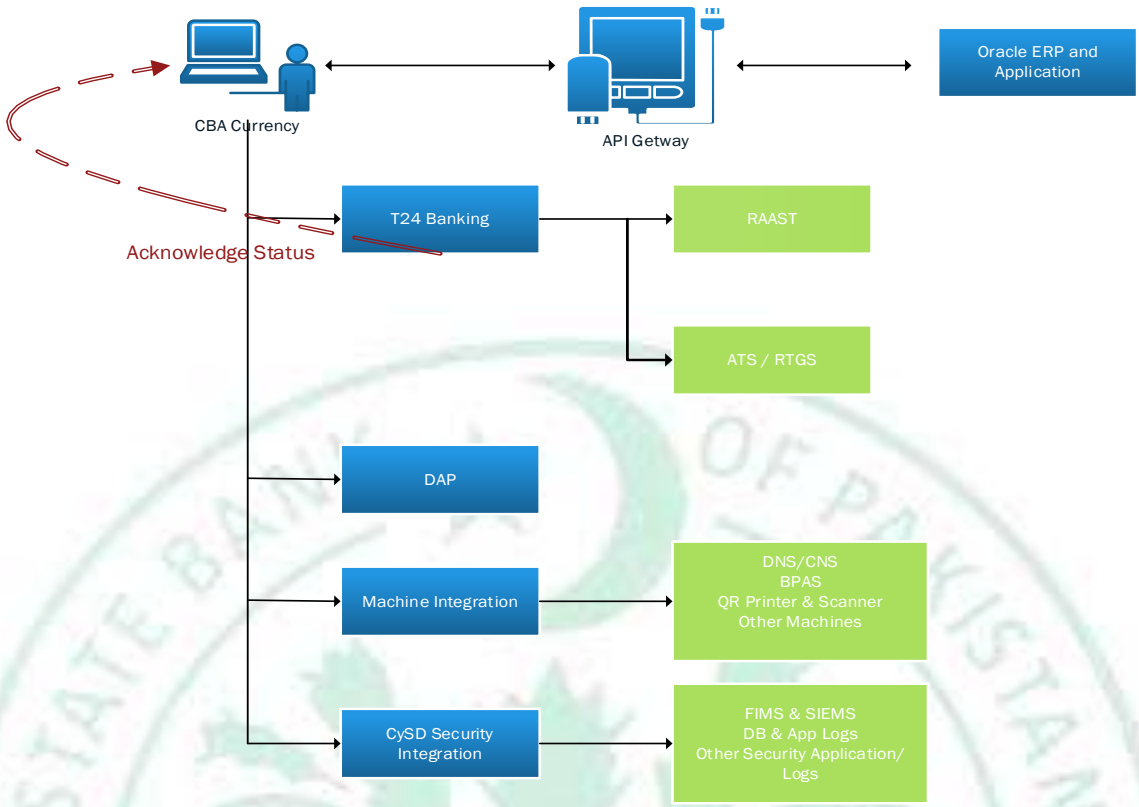
Accounts heads defined in Currency Management System – Sub Ledger should be mapped with the account available in T24 Banking which will be utilized for transferring the accounting entries data from Currency Application to relevant Interfaced Module. The module shall have the following features:

- Mapping of Currency Accounts with trial balance.
- Auto-submission or retrieval of desired data from Currency application to Interface Modules.
- Auto Re-conciliation mechanism of Currency Accounts with relevant Interface Systems.

u. Integration Requirements:

The system must have requisite interfacing using secure REST full API's and / or File based interfacing for integration with existing and/or any future systems and/or software in use at the SBP or any of its subsidiaries. The details of interfacing will be decided at the time of Implementation. System should also have the capability of API design allowing in-house development of APIs as and when needed. These indicative list of systems may include but not limited to:

- Oracle ERP through API server
- Currency Processing, Authentication and Destruction Machines
- T24 Banking
- DAP



v. User Management

This module shall be built as per the Technical Requirements mentioned in this document including following:

- Creation of Users and Password reset
- Functional Admin to manage users and employ role-based access control for all stakeholders of this application. For this purpose, Super Users shall be created for each entity who shall be able to perform user management. However, there shall be a Master User at SBP who shall regulate/control access and rights of Super User(s).
- Deactivation of Users by Helpdesk Officer
- Auto-Deactivation of Users on Long leaves/Retirement (Interface with Oracle ERP-HRIS/KM Leave system)
- Role based access control
- Implementation of session management
- Maintenance of detailed log of user activities and system events
- Correction in any transaction with Level 3 authorization (configurable)
- There shall be a super user for each entity who shall have the rights to activate/deactivate certain system functionalities for users.
- Super Users shall not be allowed to alter any log/accounting transaction/reversal etc. without the intervention of Master User.

w. Balance Track & Trace

The system must be equipped with robust functionality to retain and accurately log transaction date/time stamps as long as the integrity of the QR Code remains intact. This functionality is crucial to establish and maintain a continuous trail of balance associated with banknotes as they remain within the system with their QR Code unaltered. The recorded timestamps should cover various stages of the banknote's presence, facilitating

comprehensive tracking and auditability of balance changes as long as the barcode remains unchanged.

x. Important Terms

Some important terms used in the document are explained below:

1. Safe / Bin:

The safe is a basic term used for receptacles that are used to store various coins and banknotes. The safes function as the basic unit for the Vault. Each safe is defined by a number, the nomenclature of which is designed in a manner so as to also incorporate the name of the vault to which it belongs. A safe can store multiple denominations and categories of balances whilst maintaining segregation of each. Moreover, a safe also maintains the date of each balance that is transferred to it. Overall a safe presents following data:

- Denomination
- Quantity
- Value
- Date of Deposit
- Category

2. Counter:

The counter is an entity through which the bank transacts with external stakeholders such as government, public, banks etc. The counter marks the final threshold from whereon the banknotes & coins are issued or received.

3. Till:

The till is a term used to denote balance position of an individual. In certain instances, balances are transferred to individuals for further operations such as examiners, Hall Incharge, Counter Official etc. Therefore, balance is transferred to the user's till which is identified by the PIN of concerned official. It contains the following information:

- Denomination(s)
- Quantity
- Value
- Category
- Transactions carried out during the day

A user's till must be empty at the start and close of day. This till shall also be instrumental in compiling a user's Teller Log which is akin to an Account Statement of the user where the account number is the user's PIN.

4. Logistic Units:

- **Bundle:**

  A bundle is a collection of ten packets where each packet consists of 100 banknotes of a particular denomination. Each bundle contains banknotes of a single denomination and category. As such, for each category and denomination, there is a separate bundle. Category-wise, there are four types of banknotes i.e. Fresh, Re-issue, Soiled, Defective.

- **Box:**

Fresh Banknote bundles of same denomination are packed into corrugated cardboard boxes. Each box shall contain 10 bundles of fresh banknotes of same category. However, the quantity of bundles in a box shall be defined by system administrator so as to allow any future policy changes. Only fresh category banknotes are packed in boxes by PSPC.

- **Cash Tray:**
  Commercial banks and Chests are required to submit soiled and re-issue balances in duly sealed plastic cash trays. Each tray is sealed using plastic zip seals having a specific serial number so as to deter any tampering. As such, bundles are packed into these sealed cash trays.
- **Pallets:**
  A pallet is combination of 50 corrugated cardboard boxes containing fresh note bundles. Pallets are only created for fresh category banknote bundles.

y. QR Coding Scheme:

The coding scheme should be based on configuration with respect to the length and position of the fields. The QR code should support capability to support dynamic QR code generation and reading (configurable).

Each packaging unit shall have a QR code which shall contain information regarding the contents of the package:

Actor	RDBMS Sequence	Description	Packing	Originator Identifier	Category Identifier	Logistic Unit Identifier	12 Digit Serial	Transaction / Bar Code ID
PSPC	SEQ1	Fresh Note Transaction	Bundle	P	F	B	000000000001	PFB000000000001
	SEQ2		Box	P	F	X	000000000001	PFX000000000001
	SEQ3		Pallet	P	F	L	000000000001	PFL000000000001
Chests	SEQ10	Soiled Note Transaction	Bundle	N	S	B	000000000001	NSB000000000001
	SEQ13		Tray	N	S	T	000000000001	NST000000000001
	SEQ14	Re-issue Transactions	Bundle	N	R	B	000000000001	NRB000000000001
	SEQ15		Tray	N	R	T	000000000001	NRT000000000001
SBP	SEQ19	Soiled	Bundle	S	S	B	000000000001	SUB000000000001
	SEQ20		Tray	S	S	T	000000000001	SUT000000000001
	SEQ21	Defective Note Transactions	Tray	S	D	T	000000000001	SDT000000000001
	SEQ22	Re-issue Note Transactions	Bundle	S	R	B	000000000001	SRB000000000001
	SEQ23		Tray	S	R	T	000000000001	SRT000000000001
Banks	SEQ24	Soiled Note Transaction	Bundle	C	S	B	000000000001	CSB000000000001
	SEQ26		Tray	C	S	T	000000000001	CST000000000001
	SEQ27	Re-issue Transaction	Bundle	C	R	B	000000000001	CRB000000000001
	SEQ29		Tray	C	R	T	000000000001	CRT000000000001

The QR codes shall be sequentially generated by the system as per the scheme given above. the QR code number generated by the system shall serve as pointer/reference to the data located in database and fetch the same upon every scan.

The QR code shall therefore comprise of 15-digit alphanumeric code out of which the first three alphabets shall represent the originating entity, banknote category and logistic unit respectively whereas the remaining 12 numeric digits shall be sequentially generated by the system. The entire QR code for every item shall be unique.

Moreover, the QR code of logistic units shall be tier based and linked in a hierarchical manner such that if the QR code of highest tier logistic unit is scanned, data of all its contents shall be fetched. The basic tier of these hierarchies shall be the bundle. In this context, two hierarchies shall emerge based on the category of banknotes.

Fresh Banknotes:

For fresh banknotes category, there shall be a three tier hierarchy:

- Tier 01 – Bundle
- Tier 02 – Box
- Tier 03 – Pallet

Soiled, Re-issue and Defective Banknotes:

For soiled, re-issue and defective banknotes categories, there shall be a two tier hierarchy:

- Tier 01 – Bundle
- Tier 02 – Cash Tray

1. Originating Entity:

- The first digit of the QR code shall denote the Originating Entity type.
- The Alpha code assignment for Originating Entities is as under:

Originating Entity	Alpha Code
PSPC	P
SBP	S
Chests	N
Commercial Bank	C

2. Category:

- The second digit of the QR code shall denote the Banknote Category.
- The Alpha code assignment for Banknote Category is as under:

Banknote Category	Alpha Code
Fresh	F
Re-issue	R
Soiled	S
Defective	D

3. Logistic Unit:

- The third digit of the QR code shall denote the Logistic Unit type.
- The Alpha code assignment for Logistic Units is as under:

Logistic Unit Type	Alpha Code
Bundle	B
Box	X

Cash Tray	T
Pallet	L

While QR code scanning/generation shall be primarily used in most of the transactions. Availability of manual inputting based versions shall also be ensured as back-up.

z. Client Sites: -

#	Client Sites	Address	
1.	SBP & SBP BSC Head Office	I. I. Chandigarh Road	Karachi
2.	SBP BSC North Nazimabad Office/NIBAF Karachi	North Nazimabad	Karachi
3.	SBP BSC Boulton Market Office	M.A. Jinnah Road	Karachi
4.	SBP BSC Lahore Office/ NIBAF	Shahrah-e-Quaid-e-Azam	Lahore
5.	SBP BSC Rawalpindi Office	The Mall, Rawalpindi Cantt; Near Hotel PC	Rawalpindi
6.	SBP BSC Islamabad Office	G 5/2, Ata-Turk Avenue	Islamabad
7.	SBP NIBAF Islamabad Office	Pitras Bukhari Road, Sector H–8/1	Islamabad
8.	Deposit Protection Corporation (DPC)	M.A. Jinnah Road	Karachi
9.	SBP BSC Faisalabad Office	82- Civil Lines, Jinnah Road	Faisalabad
10.	SBP BSC Multan Office	LMQ road, KalmaChowk,	Multan
11.	SBP BSC Gujranwala Office	Chamber of Commerce & Industry Plaza, GT Road	Gujranwala
12.	SBP BSC Bahawalpur Office	25-C, Shabbir Shaheed Road, Model Town 'A'	Bahawalpur
13.	SBP BSC Sukkur Office	Eidgah Road	Sukkur
14.	SBP BSC Hyderabad Office	Shahrah-e-Fatima Jinnah (ThandiSarak)	Hyderabad
15.	SBP BSC Sialkot Office	Kutchery Road	Sialkot
16.	SBP BSC Peshawar Office/ NIBAF	Saddar road, Peshawar Cantt	Peshawar
17.	SBP BSC Quetta Office/ NIBAF	Shara-e- Abbas Ali, Quetta Cantt	Quetta
18.	SBP BSC Muzaffarabad Office	Upper Chatter Housing Sch; Near Special Communication Organization	Muzaffarabad
19.	SBP BSC D. I. Khan Office	Bungalow no. 43/1, Shami Road	D. I. Khan

B. Technical Specification / Requirements

i. Introduction

The purpose of this project is to acquire / develop, customize and implement a web-based business application software to automate business processes of Bank's currency management operations by meeting the functional and Technical Requirements as set out in this RFP.

This automation has to be achieved by performing and following a complete software development lifecycle including but not limited to the followings:

1. Understanding and Analysis of Business requirements
2. Analysis and Finalization of the Business architecture
3. Analysis and Finalization of the Detailed Functional requirements
4. Analysis and Finalization of Technical Requirements
5. Analysis and Finalization of Technical Architecture
6. System Design and Model
7. System's Modules Development
8. Supply of System Software Components including licenses based on sizing performed in the Analysis and Finalization of Technical Requirements phase
9. Development Reviews
10. Software Quality Assurance and Testing
11. System Integrations
12. Security Assessment and Vulnerability Management
13. System Playback and UAT Cycles and Fixation of UAT Incidences
14. Production and DR deployments and Final Testing
15. Mock-runs and Parallel runs (as applicable)
16. Strategize Go-Live
17. Go-Live
18. Post Implementation acceptance phase
19. SLA of the complete solution for a period of Five (05) years starting from the date of Operational Acceptance of the system.

The prospective Supplier will provide Currency Management System that includes the following features:

1- Capable of managing configurable Multi-Book Architecture (each office should have its own User management, Balance Books, Accounts Management etc.).

2- Should be develop by utilizing well known web development frameworks or combination of frameworks like Oracle Apex, .NET / C#, Laravel, Drupal, PHP, Java and relevant scripting languages etc.

3- Should be develop on modular approach with various modules being able to function independently of each other without affecting overall system performance or disrupting other operations.

4- Should be develop on modular and Service oriented approach based on Functional Requirements mentioned in this document e.g. Admin Module, External Module, Internal Module, Fresh note issue module, Reissue Module, Destruction Module etc.

5- System should be able to create, modify and delete every object / entity of the System based on specific roles

6- Flexible setups and configurable items, which can support addition of Organization Type, Organizations, Branches, Departments, Currency Denomination, Security Roles, Unit, Vaults, transaction Type and driving components like Denomination generation of the system through online forms. Further, the functionality of the system will adjust accordingly as configured by the administrator of the system.

7- No hard coding, all the configurable items, List of Values, Security levels should be dynamic and configurable by Admin / Super users with configurable either single or 2 or more Users to authorize.

8- Capability to define the holidays / off days in the system. Further capability of organization, department, office, module wise enabling / disabling access on time and date basis for transactional activity should be part of configuration in the system.

9- User friendly and Dynamic in nature - means configurable content display.

10- Meet functional and Technical requirements provided in this document

11- Configurable mechanism to log and send email alerts or generate alarms on a monitoring console / dashboard on instances like successful and failed login attempts, specific access and specific transactional activity etc.

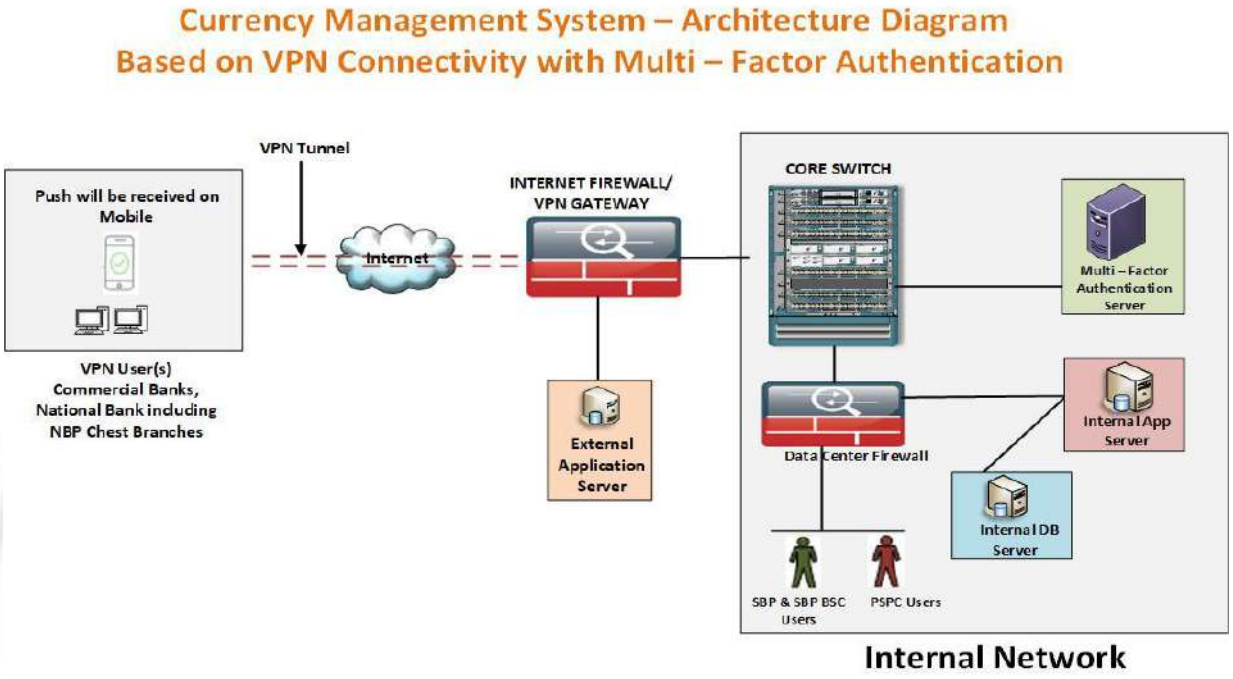
12- Reports exportable to csv, pdf (configurable to disable for users / module / roles-based), the whole activity of export to csv or pdf will be logged to System.

13- The bidder will provide following:
- Source Code
- High Level Design/Architecture Document including Configuration details
- Portal Admin Manual for routine operations
- User Manuals for the business users

14- The development shall take place off-site at the bidders owned environment whereas, Testing & implementation of the software environment(s) will take place on-site in State Bank of Pakistan.

ii. Technical Architecture & Infrastructure

Following is the Proposed High Level Application Architecture Diagram of the system for both internal and external Stakeholders of the system



1. Design and Implement high performance, high availability and Disaster tolerable network Architecture at application, Database and OS level.

2. To be implemented on the latest version/release preferably Red Hat Enterprise Linux (RHEL) server or of Microsoft Windows Server.

3. Ensure End-to-End security (Confidentiality & Integrity) of any authentication credentials captured and transferred by employing necessary hashing, encryption and signature mechanism.

4. High performance and scalable design capable of supporting virtual machine based Horizontal scaling.

5. Should be compatible with Virtualization VMware or Hyper-V platform in the Procuring Agency.

6. Compatible with all latest browsers like Google Chrome, Microsoft Edge and Apple Safari

7. The message interfaces with other systems either using TCP/IP, RESTful Web Services, MQ based or Enterprise service bus (ESB), API gateway Manager interface must have option to allow enablement of encryption.

8. For implementation, SBP will provide the required VMs based on the approved Architecture whereas, all required software (including front end, middleware, backend application, APIs, ancillary software(s), databases and required operating system license / subscription license(s)) shall be provided by the bidder for Primary, high availability, DR and Archive including right to use for 2 (two) non production environments for the entire period of the contract. All related software licensing shall be in the name of SBP – registered with OEM where applicable. The Bidder will be responsible to add any additional required licensing for OS or DB or Application or all related components of the System to fulfill the performance requirements as mentioned in this document without any extra / additional cost to the Procuring Agency.

9. Bidder will recommend the details of any specific infrastructure component or service that is assumed to be arranged by the Procuring Agency. This includes but is not limited to details such as network bandwidth requirements, data center space requirements, etc.

10. Bidder will provide the details of all open-source components used in the solution. Such details will include the component name, version of the component used and source from where it is taken. All open sourced Software support will be included during the Implementation, Live and SLA.

11. If the Bidder has proposed any software components, which are not the property of the Bidder, the license agreements should clearly mention that SBP is the end client. At the end of implementation, software licenses should be seamlessly transferred to SBP.

12. All Web, API and Interfaces licenses issued shall be independent of the transaction volumes, the number of users, the number of application instances, the number of devices connecting to the system.

13. Bidder shall recommend specifications for compatible peripheral hardware to be used with the software including but not limited to barcode scanners, barcode printers etc.

iii. Database

1. Application should support Enterprise Version of Databases such as Oracle, SQL Server, MySQL and PostgreSQL. The required Database license(s) will also be provided by Bidder that should cover the following but not limited to:
    - Complete native database multi-node onsite high availability cluster for transparent application failover to avoid single point failure and eliminate planned and unplanned downtime.
    - Native database Disaster recovery site creation options including standby database recovery option using database Hot backups.
    - Real-time Database Performance and Activity monitoring tools.
    - Native utilities for Database Administration, Performance Tuning & Diagnostics.
    - Native database online Backup and Recovery options.
    - Advance data security features, which includes data encryption on move and Data masking features.

- Support database Physical online hot backup, incremental backup, and differential backups.
- Support database recovery from online hot backups, incremental backups and differential backups.
- Support online index rebuilding.
- Native database data partitioning options.
- Support of native database auditing options including Integration with SEIM Systems.
- Complete Data Migration from Legacy System
- Registered Enterprise Level Technical support for DBMS

2. Recommend and Perform necessary configurations to setup Production, DR and Archive environments.

3. The Supplier will provide scripts to migrate, verify and audit the migration of data; further, data migration shall be carried out on-site using scripts to mask/scramble sensitive data.

iv. Performance Requirements

1. The complete solution design must support high availability within each operational site to achieve the availability of 99.5% throughout the year.
2. The solution must be capable of managing performance levels while supporting
    a. Up to 500 concurrent users
    b. Daily volume of 100,000 transactions which are a mix of all supported transactions (Remittances, QR Code, Teller Processing, Banks and Chest operation)
    c. Peak volume of 10,000 transactions submitted within an hour.

3. The User interface should concurrently support at least 200 users without becoming slow or freezing while fetching information from the application.

4. The maximum system log-in response time must not exceed 5 seconds.

5. The system user should be able to generate operational and MIS reports from the system for a period of 1 year within less than 5 minutes.

6. The solution's performance should not deteriorate with the increase in the amount of transactional data maintained in the system.

7. The Hardware sizing be done such that at peak load, the hardware utilization is below following thresholds
    - CPU utilization < 75%
    - Memory utilization < 75%
    - Storage utilization < 75%

v. Security

8. The system should have identity and access management module for managing all levels of user accounts and their privileges. creating and maintaining Role-Based Access System. For example:
    - Admin / Super users (to create users and roles)

- Functional end Users
- Functional super Users
- Technical Super Users
- System and Services Accounts

9. Configurable User access based on Role, Duration, Start and End Date including idle timeout configurations.

10. Role based Application security mechanism with the graphical admin panel having following features:
    - Role based Application and Data Security based on Organization Type, Organization, Office, Department, Division/ Function, Unit, Transaction Type, Denomination, Transactional Amount and Vaults at Screen / Forms level, Reports Level and Data Level.
    - Option to attach / detach users from the roles and should maintain the changes and audit logs of the admin module.

11. The access control mechanism should provide a security administrator role, which allows Application access administrator to perform users and roles management tasks such as manage roles (create, update, and disable), users (create, update, disable, activate, assign, or change roles).

12. The system should have the capability to authenticate and authorize users natively (locally from the application module), from external authentication sources like Microsoft Active Directory, and customized application security mechanism such as OAUTH, OIDC for external user as well as internal users (if required).

13. Application should support Captcha and multifactor authentication (TOTP) natively for all type of Users Login in the system through third party authenticators apps like. Google / IBM / Microsoft authenticator.

14. Capability to log the login attempts both successful and failed with the details of Web IP address, username, date, time etc.

15. Internal and External integrations using secure and authenticated (like JWT) Application Programming interface (API) based mechanism.

16. Configurable option for enabling / disabling multilevel transaction authorization control on (input and authorization) on forms / screens.

17. Activity, Events, Incident and Transactional logging and trails for Auditing for each activity performed at the Application and Database level.

18. Symmetric and Asymmetric Encryption support.

19. Should be able to run with already in placed licensed anti-malware and EDR solution on all of its Red Hat Enterprise Linux and Windows servers of the

Procuring Agency. The Bidder is expected to confirm that their provided solution will work with this requirement and will provide necessary technical support for installation and working of this licensed software.

20. Capability to produce comprehensive accounting, audit and security event logs with access, activity and transactional details. These audit logs should be based on application level audit log mechanism.

21. All access to the Web Based User Interfaces or API based Application and Database access to the system will be encrypted using SSL – The minimum supported version should be TLS v1.3 or latest

22. The passwords for any User (either operator or participant) must follow a minimum of these password policy standards:
    Password policy should allow following configurable parameters
    i. Minimum and Maximum Password length (Minimum 8 characters and Maximum 32 characters or more)
    ii. Option to enforce alphanumeric password
    iii. Option to enforce of special characters in password
    iv. Option to enforce password has at least 1 Upper case character or at least 1 lower case character
    v. Password aging
    vi. Password expiry settings

23. The passwords and access credentials including TOTP shall never be stored at anywhere in plain text or without employing industry standard of hashing and encryption.

24. Support a pre-defined session-time out and maximum number of concurrent sessions which should be centrally configurable.

25. Generic messages for login attempts failures and account lockouts.

26. The application should be free from OWASP Top 10 security vulnerabilities.

27. Vulnerability assessment shall be performed by SBP for the system, Application and its underlying OS and DB components and vulnerabilities identified in the application or system component provided by the bidder shall be fixed by the Bidder before go-live.

28. Data at rest encryption. The Bidder will ensure that their solution has provision to encrypt all Sensitive data in transit when transferred either between various components of application or between the system and participants

29. The algorithms used for Encryption used throughout the solution both in application and software should be strong encryption algorithms with minimum key lengths that are approved by the Procuring Agency e.g. AES-256.

30. Functionality to terminate all linked multiple backend/host sessions after the user session is terminated

31. Bidder shall provide list of all open source software (OSS) used in the application. Obsolete or old versions of OSS should not be used.

32. Bidder will provide system and hosting architecture document containing network diagram, System Names, Platforms version, Application and DB versions, IP addresses, Ports, Protocols used on each system describing data flows

33. The Bank has FIM solution in place and deployed on all servers. The Bidder will be expected to provide details of critical files (core application executables, parameter files etc.) and their paths during the solution implementation whose integrity is to be monitored via FIM.

34. Bidder shall implement baseline security configuration in accordance with relevant CIS benchmark where applicable on Application, Database and Web servers. The acceptable threshold for the operating system (RHEL or Microsoft Windows) is at least 80% compliance to CIS Level 1 benchmark. If CIS benchmark for the component is not available, then OEM provided baseline security recommendations should be implemented during installation of the solution.

35. Capability to send audit and security event logs to Procuring Agency's SIEM platform.
    Details of Logs types are stated below:
    - Non Admin Users Activity logs
    - Privilege Users Activity logs
    - System Administrator creation/revocation logs
    - User Enable/Disable logs
    - User lockout logs
    - User Creation/Modification/Deletion logs
    - Role Assignment/Modification/Revocation logs
    - Application Critical Services Start/Stop logs

36. Capability to send audit and security event logs to Procuring Agency's SIEM platform, including following details:
    - User identification
    - Type of event
    - Date and time
    - Success or failure indication
    - Data accessed
    - Application, program, or utility used
    - Origination of event (e.g., network address)
    - Target of event (e.g., network address, host name)
    - Protocol
    - Identity or name of affected data, information system, or network resource

- Commands Executed

37. For Security events logging related to Database, the Bidder must confirm that security events are generated and pushed to SIEM solution in following scenarios
    - Access and access attempts to SYS, SYSDBA or other privileged credentials
    - Account creation/modification/deletion
    - Authentication failure and login failures
    - Authentication success and login success
    - Role Access Assign/Revoke
    - Object Access Assign/Revoke
    - Password change (by privileged user)
    - Service starts and stops
    - System or application audit or logging policy change
    - All DDL and DML operations

vi. Project Management

Finalization of Project management Methodology based on a combination of Agile approach.

Project Governance

The Supplier will assign senior representative(s) (whose profile will be shared with Procuring Agency in advance for its concurrence) who will be member of the Project Steering Committee, which will oversee the implementation of the Project to be chaired by Senior Representatives from Procuring Agency.

The Supplier shall ensure resolution of project implementation obstacles in coordination backed by their principal / Original Manufactures of the Software Components with complete Assurance and Support.

Project Manager

The Supplier will depute a Project Manager having at least ten years of relevant experience who shall supervise / steer the project and ensure its successful implementation and operations as per the requirements within the project timelines. The Project Manager and his team shall be dedicatedly available on-site and involved from the time of signing of contract up to the Operational Acceptance, after which the SLA requirements will be applicable.

The Procuring Agency will also appoint Project Manager that along with Supplier's Project Manager, who will be responsible for ensuring the successful and full discharge of their respective parties' obligations under this contract. The both Project Managers will work closely together at all stages of the implementation.

Project Charter and Plan

The Supplier's Project Manager will provide Project Charter - developed with the consent of Project team of the Procuring Agency. The Project Charter will include but not limited to project goals, objectives and resource requirements, communication plan, risk plan, issue

resolution plan, etc., structure, competencies, roles and responsibilities of the proposed project team.

The Project Plan will be provided by bidder within 2 weeks of contract signing. Approval of Project implementation plan will be provided by the Procuring Agency. The project plan should include Complete detailed activities, timelines, resources, responsibilities, dependencies / risks and critical path analysis for all the phases mentioned above.

Technical Team

The project team should at least include key specialists and alternates for following positions:

a) Business Architect and Analysts
b) Technical Software/Application Development Specialists
c) Systems integrators (API Specialists)
d) Trainers for training of technical and end-users.
e) Database Engineers and Administrator(s)
f) System Engineers and Administrators
g) Security Specialist(s) for Application, Database, Servers, Network and Operating Systems.

Each key specialist should have at least five years of relevant experience of working on similar related project with relevant certifications. The profiles of Project Team will be shared by the Supplier with the Procuring Agency and with their consent the Project team of the Supplier will be finalized. It is required that the Supplier's project team, particularly the key specialists, will be assigned to this project throughout its duration. If any of these persons become unavailable for the project for reasons outside the Supplier's control, the Supplier should appoint alternate persons of at least equivalent capability and experience with the approval of the Procuring Agency without any delay. If the Procuring Agency is not satisfied with the quality of resource(s), the Procuring Agency may ask for replacement of any of the Supplier's team member assigned to this project at any time.

The supplier will be required to engage expert resourcing from the Principal / OM or Parent organization whenever required during the period of contract for successful implementation and support in resolving issues.

vii. Delivery

Delivery will be considered accomplished when the complete software package, license keys and relevant source code will be delivered to the Procuring Agency and deployed in Production and DR environment.

Bidder will provide source code and support material (e.g., product literature, user manuals, narrative descriptions of technologies and/or technical approaches etc.), as required and appropriate that will be considered intellectual property of State Bank of Pakistan.

viii. Disaster Recovery Setup

Bidder should configure the Disaster Recovery Setup with Gold tier RTO~0 data loss and RPO=4 Hours, further if any additional components / licensed required, the bidder will procure the same.

ix. Training

The Supplier will provide comprehensive hands on, in-person and face-to-face Technical and Functional Trainings of Products and necessary documentation including award of training completion certificates to Procuring Agency staff by respective Principal / OM certified trainer at Client Site(s). The Procuring Agency will provide the Training Facility including equipment(s).

The trainer(s) profile and training contents will be shared with Procuring Agency for prior approval.

#	Description	Number of Trainees	Training Duration
1	Installation, Administration, Configuration, Security, Troubleshooting, Maintenance, Preventive Maintenance, Associated Tools / Components Administration / Setup , Performance Tuning, EOD, Database Administration etc.	10	1 Week
2	System Architecture Design, Development including Tools and API etc. under the offered software	10	2 Weeks
3	Functional Training for Super Users (Batch of 20)	40	2 Weeks per Batch

x. Operational Acceptance (Post Implementation Acceptance)

At least Three (03) month of successful operations after the Go-Live Date of the system. Operational Acceptance Certificate will be issued after successful completion of the project, by the Procuring Agency.

xi. Testing, Quality Assurance & Mock Runs Requirements

The Supplier (with the assistance of the Procuring Agency) will perform the following tests onsite to meet all the requirements.

- Pre Commissioning unit testing will be performed for system before formal UAT that covers all aspects of the product, such as user interfaces, product parameters, product functionality work flows, and anything that comprehensively effects the functionality of the product
- Pre Commissioning UATs for system will be performed. The end users will verify all the functions of the system including interfaces against the test scripts provided by the Procuring Agency. The Supplier will provide standard format on which test scripts will be prepared and will assist Procuring Agency team to prepare them.
- Pre Commissioning Quality Assurance for system will be performed to address identified gaps.
- Pre Commissioning Vulnerability scanning for system will be performed to address identified vulnerabilities.
- Pre Commissioning failover test will be performed where all components at Primary site will become unavailable and DR site will be tested.
- The Supplier will provide the user acceptance-testing plan. The Supplier's UAT test plan will include the processes of issue classification, prioritization, and resolution.

- Training of the acceptance team will be carried out prior to UAT. The success criteria need to be provided, defined, and agreed upon for each UAT test, cycle, or UAT bed.
- At the end of each successful test, the Procuring Agency's Project Manager will provide to the Supplier either a formal communication of acceptance, otherwise will issue a statement specifying which obligations have not been met and should be met before acceptance can be granted.
- Both the Procuring Agency's and Supplier's Project Managers will decide about the rating of incidences raised during acceptance testing for system. Issues identified during UAT are required to be closed prior to UAT sign off.
- The Procuring Agency may agree to defer addressing some issues to post rollout of the system and to give a conditional UAT sign off.
- Procuring Agency will perform at least two mock runs of system and issues identified by the Procuring Agency will have to be addressed by the Supplier. The subsequent mock run(s) - if required- will be performed with mutual understanding of the Supplier and the Procuring Agency depending upon the number and severity of issues of mock run(s).
- A rollback/ fallback plan should be in place (appropriately discussed and agreed by the Procuring Agency) before Go Live; in case, any critical issues are faced during the GO Live stage.
- Provide detailed acceptance test plan, including identification of the systems to be tested, specific tests and processes to be performed, standard test scripts, regression testing, performance testing, penetration tests and the respective testing schedules.
- Final security assessment of the Production/Live ready systems, which includes Vulnerability and Configurations Assessments, and Penetration Testing of the systems, would be carried out by Procuring Agency's external consultant. The supplier will mitigated/remediated identified vulnerabilities/weaknesses in the target systems / applications/databases.

xii. Documentation Requirements

The Supplier will provide artifacts, documents, manuals, catalogues and other necessary documents related to administration of the system, database and Infrastructure design and implementation. All artifacts, documents, manuals, catalogues and information furnished by the Supplier shall become the property of the Procuring Agency.

The Supplier will provide the below mentioned documentation adhering to best practices and industry standards. The supplier will obtain sign-off from the Bank for all the documents submitted and shall make necessary changes as per the customizations done (if any), as well as the changes recommended by the Bank before submitting the final version of the documents.

- User Training Kit
- Solution Architecture Document
- Requirements Analysis document
- Functional specifications document
- Technical specifications document
- Interface specifications document High Level Design Document
- Database Design Document
- System Administration Document
- System Configuration and Parameter Document

- System Maintenance Document
- Data Maintenance Document and Archival Document
- Test strategy and test cases – Unit Testing & System and Integration Testing
- User Manuals

xiii. Source Code Requirements

The complete Software Source Code / Libraries / Services and all related documentation after Go-Live will be handed-over to Procuring Agency and will remain intellectual property of Procuring Agency.

xiv. Live Operations

Subsequent to successful completion of UAT(s), System Integration acceptance, mock runs, compliance of security observations & vulnerabilities and acceptance of Procuring Agency, the date of LIVE operations for system will mutually be decided by Procuring Agency and Supplier keeping constraints in view of the critical days of operations, number and severity of UAT/SIT issues, security observations & vulnerabilities.

The Supplier shall be responsible for installation and necessary configurations of the system at Primary and DR sites. The Procuring Agency team will perform the function under supervision of Supplier's team.

The Procuring Agency will run at least one day live operations from DR site during the post live operations. The Supplier will provide full support for these operations, to ensure successful DR testing.

xv. Post Live Support

The Supplier will provide support for production system as per the following arrangement and will ensure that sufficient resources will be available to manage the critical issues as rated by the Procuring Agency for 90 Days onsite after Go-LIVE. The Supplier will be responsible to resolve the issues identified during the Post-Live period with the acceptable Application Availability and Response Time.

xvi. SLA & Technical Support (05 Years)

Supplier shall depute 02 (two) Application Specialists as Resident Engineers for Application Enhancements and Support for a period of 02 (two) years in addition to providing Maintenance and Technical Support Services for Application and Database for 5 years from the date of Operational Acceptance. The services include:

- Complaints handling to ensure availability and expected use of the System
- Patch, Repair or Fix the component(s)
- Fixing Security Vulnerabilities identified during regular Vulnerability Scan and IT Security reviews.
- Resolution and fixation of Application and database level issues resolution for database administration & management.
- The severity and impact criteria mentioned below are indicative; any situation not documented here will be addressed using same methodology.

Severity	Red	Yellow	Green
Impact	- The whole or major business is down, interrupted or severely impacted	- Some of the system components are down or malfunctioning due to which one or more business domains are significantly impacted	- The business is not significantly affected, however, requiring some development/maintenance /guidance efforts
Criteria	- The Production and Backup systems are down affecting business. - Major solution components are inoperative - System performance has severely degraded	- Either of the Production or Backup systems is down - Sub-system(s) or some of its components(s) is/are down. - Technical issues are being faced causing interruptions to the operations or any failure in its functionality due any suspected software failure/fault	- The system is available however; performance tuning, software patch installation or software update or version upgrade is required during a planned activity. - Operational performance of the appliance / system is facing error(s), while the operations remain functional.
Response Time	- Within 30 minutes	- Within 2 hour	- Next Business day
Resolution Time	- Within (01) business hours	- Within (04) business hours	- Within (96) business hours
Action	- Immediate availability of onsite expert for resumption of Business operations within three hours - Troubleshoot, Rectify, Repair, Replace, Re-install, Re-configure and Re-deploy component (s) to ensure error free resumption of business operations within resolution time - Escalation by Supplier to Principal / OM for immediate technical support from OM via email, internet or phone.	- On-Site Technical Expert Support on Call Basis. - Troubleshoot, Rectify, Repair, Replace, Re-install, Re-configure and Re-deploy component (s) to ensure resumption of business operations within specified hours as per requirement - Escalation to Principal / OM for immediate technical support from Principal / OM via email, internet or phone as per requirement	- Technical Support on Call Basis or On-Site as per requirements. - Technical assistance from Principal / OM via internet or phone as per requirements. - Firmware/software patches updates and upgrades. - Information or assistance (as required) from the supplier/manufacturer of product capabilities, installation, or configuration

Support Coverage	- 24 x 7	- During business days or otherwise notified by the Government of Pakistan or Procuring Agency on special occasions.	- During business days.

Technical Specifications / Requirements

After meeting the requirements of eligibility, qualification and substantial responsiveness, the bid must be in compliance with all the mandatory (technical) specifications/requirements as per requisite quality threshold given in the appended **Table-X: Technical Compliance.**

Table-X: Technical Compliance			
S#	**Specification / Requirement**	**Bidder's Assessment (Yes/No)**	**Reference in Bid (if any)**
Business Requirements			
1	Provide complete Currency Management System functionalities and capabilities based upon the Functional Requirements		
2	Reporting, Management Dashboards and Data Analytics Capability		
3	Currency Issue Accounting and Sub-Ledger Management		
4	Inter-Bank Exchange of Currency		
5	Capable to handle Currency Demand Forecasting and Analysis for Indent Preparation for Notes and Coins, Indent Manufacturing ordering of various Denominations, Delivery Scheduling, Vault / Stock Management, Issuance / Remittances Management, Soiled Notes and Destruction Management		
6	Modular development to support parametric inclusion / exclusion of the stakeholders in different roles		
7	Support for creating various reports based on Wizard-based selection criteria created by the user(s) and data available at back-end		
8	Support for managing Users, System configuration / Parameterization , accounting and Sub ledger in a configurable multi-book architecture (Each office should have its own balance books of SBP and SBPBSC offices		
9	Support for robust functionality to retain and accurately log transaction date/time stamps as long as the integrity of the QR Code remains intact		
10	Support QR Coding and Printing		
11	Support for parametric Close of Business Day / Month-End / Year-End Operations		
Technical Requirements			
12	Provide complete Currency Management System functionalities and capabilities based upon the Technical Requirements		
13	Capable of managing configurable Multi-Book Architecture (each office should have its own User management, Balance Books, Accounts Management etc.).		
14	Should be develop by utilizing well known web development frameworks or combination of frameworks like Oracle Apex, .NET / C#, Laravel, Drupal, PHP, Java and relevant scripting languages etc.		
15	Should be develop on modular approach with various modules being able to function independently of each other without affecting overall system performance or disrupting other operations		
16	Should be develop on modular and Service oriented approach based on Functional Requirements mentioned in this document		
17	System should be able to create, modify and delete every object / entity of the System based on specific roles		
18	Flexible setups and configurable items, which can support addition of Organization Type, Organizations, Branches, Departments, Currency Denomination, Security Roles, Unit, Vaults, transaction Type and driving		

	components like Denomination generation of the system through online forms. Further, the functionality of the system will be adjusted / parameterized accordingly as configured by the administrator of the system.		
19	No hard coding, all the configurable items, List of Values, Security levels should be dynamic and configurable by Admin / Super users with configurable either single or 2 or more Users to authorize		
20	Capability to define the Working days, Weekends, Month-ends, Year-ends and Holidays in the system		
21	Capability of organization, department, office, module wise enabling / disabling access on time and date basis for transactional activity should be part of configuration in the system.		
22	User friendly and Dynamic in nature - means configurable content display.		
23	Configurable mechanism to log and send email alerts or generate alarms on a monitoring console / dashboard on instances like successful and failed login attempts, specific access and specific transactional activity etc.		
24	Reports exportable to csv, pdf (configurable to disable for users / module / roles-based), the whole activity of export to csv or pdf will be logged to System.		
25	The bidder will provide following: • Source Code • High Level Design/Architecture Document including Configuration details • Portal Admin Manual for routine operations • User Manuals for the business users		
26	The development shall take place off-site at the bidders owned environment whereas, Testing & implementation of the software environment(s) will take place on-site in State Bank of Pakistan.		
Security Requirements			
27	Should have identity and access management module for managing all levels of user accounts and their privileges. creating and maintaining Role-Based Access System. For example: • Admin / Super users (to create users and roles) • Functional end Users • Functional super Users • Technical Super Users • System and Services Accounts		
28	Configurable User access based on Role, Duration, Start and End Date including idle timeout configurations.		
29	Role based Application security mechanism with the graphical admin panel having following features: • Role based Application and Data Security based on Organization Type, Organization, Office, Department, Division/ Function, Unit, Transaction Type, Denomination, Transactional Amount and Vaults at Screen / Forms level, Reports Level and Data Level. • Option to attach / detach users from the roles and should maintain the changes and audit logs of the admin module.		
30	The access control mechanism should provide a security administrator role, which allows Application access administrator to perform users and roles management tasks such as manage roles (create, update, and disable), users (create, update, disable, activate, assign, or change roles).		
31	The system should have the capability to authenticate and authorize users natively (locally from the application module), from external authentication		

	sources like Microsoft Active Directory, and customized application security mechanism such as OAUTH, OIDC for external user as well as internal users (if required).		
32	Application should support Captcha and multifactor authentication (TOTP) natively for all type of Users Login in the system through third party authenticators apps like. Google / IBM / Microsoft authenticator.		
33	Capability to log the login attempts both successful and failed with the details of Web IP address, username, date, time etc.		
34	Capability to log the login attempts both successful and failed with the details of Web IP address, username, date, time etc.		
35	Internal and External integrations using secure and authenticated (like JWT) Application Programming interface (API) based mechanism.		
36	Configurable option for enabling / disabling multilevel transaction authorization control on (input and authorization) on forms / screens.		
37	Activity, Events, Incident and Transactional logging and trails for Auditing for each activity performed at the Application and Database level.		
38	Symmetric and Asymmetric Encryption support.		
39	Should be able to run with already in placed licensed anti-malware and EDR solution on all of its Red Hat Enterprise Linux and Windows servers of the Procuring Agency. The Bidder is expected to confirm that their provided solution will work with this requirement and will provide necessary technical support for installation and working of this licensed software.		
40	Capability to produce comprehensive accounting, audit and security event logs with access, activity and transactional details. These audit logs should be based on application level audit log mechanism.		
41	All access to the Web Based User Interfaces or API based Application and Database access to the system will be encrypted using SSL – The minimum supported version should be TLS v1.3 or latest		
42	The passwords for any User (either operator or participant) must follow a minimum of these password policy standards: Password policy should allow following configurable parameters • Minimum and Maximum Password length (Minimum 8 characters and Maximum 32 characters or more) • Option to enforce alphanumeric password • Option to enforce of special characters in password • Option to enforce password has at least 1 Upper case character or at least 1 lower case character • Password aging • Password expiry settings		
43	The passwords and access credentials including TOTP shall never be stored at anywhere in plain text or without employing industry standard of hashing and encryption.		
44	Support a pre-defined session-time out and maximum number of concurrent sessions which should be centrally configurable.		
45	Generic messages for login attempts failures and account lockouts.		
46	The application should be free from OWASP Top 10 security vulnerabilities.		
47	Vulnerability assessment shall be performed by SBP for the system, Application and its underlying OS and DB components and vulnerabilities identified in the application or system component provided by the bidder shall be fixed by the Bidder before go-live.		
48	Data at rest encryption. The Bidder will ensure that their solution has provision to encrypt all Sensitive data in transit when transferred either		

	between various components of application or between the system and participants		
49	The algorithms used for Encryption used throughout the solution both in application and software should be strong encryption algorithms with minimum key lengths that are approved by the Procuring Agency e.g. AES-256.		
50	Functionality to terminate all linked multiple backend/host sessions after the user session is terminated		
51	Bidder shall provide list of all open source software (OSS) used in the application. Obsolete or old versions of OSS should not be used.		
52	Bidder will provide system and hosting architecture document containing network diagram, System Names, Platforms version, Application and DB versions, IP addresses, Ports, Protocols used on each system describing data flows		
53	The Bank has FIM solution in place and deployed on all servers. The Bidder will be expected to provide details of critical files (core application executables, parameter files etc.) and their paths during the solution implementation whose integrity is to be monitored via FIM.		
54	Bidder shall implement baseline security configuration in accordance with relevant CIS benchmark where applicable on Application, Database and Web servers. The acceptable threshold for the operating system (RHEL or Microsoft Windows) is at least 80% compliance to CIS Level 1 benchmark. If CIS benchmark for the component is not available, then OEM provided baseline security recommendations should be implemented during installation of the solution.		
55	Capability to send audit and security event logs to Procuring Agency's SIEM platform. Details of Logs types are stated below: • Non Admin Users Activity logs • Privilege Users Activity logs • System Administrator creation/revocation logs • User Enable/Disable logs • User lockout logs • User Creation/Modification/Deletion logs • Role Assignment/Modification/Revocation logs • Application Critical Services Start/Stop logs		
56	Capability to send audit and security event logs to Procuring Agency's SIEM platform, including following details: • User identification • Type of event • Date and time • Success or failure indication • Data accessed • Application, program, or utility used • Origination of event (e.g., network address) • Target of event (e.g., network address, host name) • Protocol • Identity or name of affected data, information system, or network resource • Commands Executed		
57	For Security events logging related to Database, the Bidder must confirm that security events are generated and pushed to SIEM solution in following scenarios		

	• Access and access attempts to SYS, SYSDBA or other privileged credentials • Account creation/modification/deletion • Authentication failure and login failures • Authentication success and login success • Role Access Assign/Revoke • Object Access Assign/Revoke • Password change (by privileged user) • Service starts and stops • System or application audit or logging policy change • All DDL and DML operations		
Database Requirements			
58	Application should support Enterprise Version of Databases such as Oracle, SQL Server, MySQL and PostgreSQL.		
59	Complete native database multi-node onsite high availability cluster for transparent application failover to avoid single point failure and eliminate planned and unplanned downtime.		
60	Native database Disaster recovery site creation options including standby database recovery option using database Hot backups.		
61	Real-time Database Performance and Activity monitoring tools.		
62	Native utilities for Database Administration, Performance Tuning & Diagnostics.		
63	Native database online Backup and Recovery options.		
64	Advance data security features, which includes data encryption on move and Data masking features.		
65	Support database Physical online hot backup, incremental backup, and differential backups.		
66	Support database recovery from online hot backups, incremental backups and differential backups.		
67	Support online index rebuilding.		
68	Native database data partitioning options.		
69	Support of native database auditing options including Integration with SEIM Systems.		
70	Complete Data Migration from Legacy System		
71	Registered Enterprise Level Technical support for DBMS		
72	Recommend and Perform necessary configurations to setup Production, DR and Archive environments.		
73	The Supplier will provide scripts to migrate, verify and audit the migration of data; further, data migration shall be carried out on-site using scripts to mask/scramble sensitive data.		
Licensing			
74	Provide all required software (including front end, middleware, backend application, APIs, databases and required operating system license / subscription license(s)) shall be provided by the bidder for Primary, high availability and DR as well as 3 non production environments for the entire period of the contract		
Integration			
75	Support for requisite interfacing using secure REST full API's and / or File based interfacing for integration with existing and/or any future systems and/or software in use at the SBP or any of its subsidiaries		
76	Capability of API design allowing in-house development of APIs as and when needed		
77	System Integration with;		

	• Oracle ERP through API server • Currency Processing, Authentication and Destruction Machines • T24 Banking • DAP • Security Systems		
Data Migration			
78	Take-on (Conversion) of entire data including archive data from existing T24 Currency system to the new system including relevant reporting		
Architecture and Infrastructure			
79	Design and Implement high performance, high availability and Disaster tolerable network Architecture at application, Database and OS level.		
80	To be implemented on the latest version/release preferably RedHat Enterprise Linux (RHEL) server or of Microsoft Windows Server.		
81	Ensure End-to-End security (Confidentiality & Integrity) of any authentication credentials captured and transferred by employing necessary hashing, encryption and signature mechanism.		
82	High performance and scalable design capable of supporting virtual machine based Horizontal scaling.		
83	Should be compatible with Virtualization VMware or Hyper-V platform in the Procuring Agency.		
84	Compatible with all latest browsers like Google Chrome, Microsoft Edge and Apple Safari		
85	The message interfaces with other systems either using TCP/IP, RESTful Web Services, MQ based or Enterprise service bus (ESB), API gateway Manager interface must have option to allow enablement of encryption.		
86	For implementation, SBP will provide the required VMs based on the approved Architecture whereas, all required software (including front end, middleware, backend application, APIs, ancillary software(s), databases and required operating system license / subscription license(s)) shall be provided by the bidder for Primary, high availability, DR and Archive including right to use for 2 (two) non production environments for the entire period of the contract.		
87	All related software licensing shall be in the name of SBP – registered with OEM where applicable. The Bidder will be responsible to add any additional required licensing for OS or DB or Application or all related components of the System to fulfil the performance requirements as mentioned in this document without any extra / additional cost to the Procuring Agency		
88	Bidder will recommend the details of any specific infrastructure component or service that is assumed to be arranged by the Procuring Agency. This includes but is not limited to details such as network bandwidth requirements, data centre space requirements, etc.		
89	Bidder will provide the details of all open-source components used in the solution. Such details will include the component name, version of the component used and source from where it is taken. All open sourced Software support will be included during the Implementation, Live and SLA.		
90	If the Bidder has proposed any software components, which are not the property of the Bidder, the license agreements should clearly mention that SBP is the end client. At the end of implementation, software licenses should be seamlessly transferred to SBP.		
91	All Web, API and Interfaces licenses issued shall be independent of the transaction volumes, the number of users, the number of application instances, the number of devices connecting to the system.		

92	Bidder shall recommend specifications for compatible peripheral hardware to be used with the software including but not limited to barcode scanners, barcode printers etc.		
93	Comply with Procuring Agency of Testing, Quality Assurance & Mock Runs Requirements		
Performance Requirements			
94	The complete solution design must support high availability within each operational site to achieve the availability of 99.5% throughout the year		
95	The solution must be capable of managing performance levels while supporting • Up to 500 concurrent users • Daily volume of 100,000 transactions which are a mix of all supported transactions (Remittances, QR Code, Teller Processing, Banks and Chest operation) • Peak volume of 10,000 transactions submitted within an hour		
96	The User interface should concurrently support at least 200 users without becoming slow or freezing while fetching information from the application		
97	The maximum system log-in response time must not exceed 5 seconds.		
98	The system user should be able to generate operational and MIS reports from the system for a period of 1 year within less than 5 minutes.		
99	The solution's performance should not deteriorate with the increase in the amount of transactional data maintained in the system.		
100	The Hardware sizing be done such that at peak load, the hardware utilization is below following thresholds • CPU utilization < 75% • Memory utilization < 75% • Storage utilization < 75%		
Project Governance and Team Management			
101	Project management Methodology based on a combination of Agile approach		
102	Dedicated Project Manager having at least ten years of relevant experience who shall supervise / steer the project		
103	Assignment of Project team should at least include key specialists and alternates for following positions: • Business Architect and Analysts • Technical Software/Application Development Specialists • Systems integrators (API Specialists) • Trainers for training of technical and end-users. • Database Engineers and Administrator(s) • System Engineers and Administrators • Security Specialist(s) for Application, Database, Servers, Network and Operating Systems.		
104	Complete software package, license keys and relevant source code will be delivered to the Procuring Agency and deployed in Production and DR environment		
105	configure the Disaster Recovery Setup with Gold tier RTO~0 data loss and RPO=4 Hours		
Training			
106	Provide comprehensive hands on, in-person and face-to-face, 10 official for Technical (System Architecture Design, Development including Tools and API etc. under the offered software) & 10 official for Administration (Installation, Administration, Configuration, Security, Troubleshooting, Maintenance, Preventive Maintenance, Associated Tools / Components		

	Administration / Setup , Performance Tuning, EOD, Database Administration etc.)		
107	Provide Functional training for Super Users in 2 batches, 20 Bank's officials / batch in-person and face-to-face on the proposed solution.		
SLA & Support			
108	Complete Software Source Code / Libraries / Services and all related documentation after Go-Live will be handed-over to Procuring Agency and will remain intellectual property of Procuring Agency		
109	Responsible to provide Maintenance and Technical Support services of Application and Database for 5 years from the date of Operational Acceptance as per terms & conditions mentioned in Section V: Technical Requirements		
110	Complaints handling to ensure availability and expected use of the System		
111	Patch, Repair or Fix the component(s)		
112	Fixing Security Vulnerabilities identified during regular Vulnerability Scan and IT Security reviews		
113	The severity and impact criteria mentioned below are indicative; any situation not documented here will be addressed using same methodology.		
114	Support for application related issues resolution for application administration & management.		
115	Support for database related issues resolution for database administration & management.		
116	Depute 2 (two) Application Specialists for a period of two (02) years for Application Enhancement(s) and Support.		
Documentation			
117	Provide artifacts, documents, manuals, catalogues and other necessary documents related to administration of the system, database and Infrastructure design and implementation		
118	All artifacts, documents, manuals, catalogues and information furnished by the Supplier shall become the property of the Procuring Agency		
119	Supplier will obtain sign-off from the Bank for all the documents submitted and shall make necessary changes as per the customizations done		
Testing, Quality Assurance & Mock Runs Requirements			
120	Provide detailed acceptance test plan, including identification of the systems to be tested, specific tests and processes to be performed, standard test scripts, regression testing, performance testing, penetration tests and the respective testing schedules.		
121	Provide rollback/ fallback plan and Test before Go Live		
122	Mitigated / Remediated identified Vulnerabilities/Weaknesses in the target Systems / applications / Databases.		

Seal & Signature of Bidder: _____

Date:

Implementation Schedule

#	Phases	Stages	Schedule (In Months)
1.	Initiation	Project Charter and Plan with approval of SBP	18 Months
2.		Understanding and Analysis of Business requirements	
3.		Analysis and Finalization of the Business architecture	
4.	Design	Analysis and Finalization of the Detailed Functional requirements	
5.		Analysis and Finalization of Technical Requirements	
6.		Analysis and Finalization of Technical Architecture	
7.		System Design and Model	
8.	Development	System's Modules Development	
9.		Supply of System Software Components including licenses based on sizing performed in the Analysis and Finalization of Technical Requirements phase	
10.		Trainings	
11.		Development Reviews	
12.	Testing	Software Quality Assurance and Testing	
13.		System Integrations	
14.		Security Assessment and Vulnerability Management	
15.		System Playback and UAT Cycles and Fixation of UAT Incidences	
16.	Implementation	Data Conversion and Migration Plan	
17.		Production and DR deployments and Final Testing	
18.		Mock-runs and Parallel runs (as applicable)	
19.		Strategize Go-Live	
20.	Production	Operational Acceptance / Go-Live	
21.		Post Implementation Acceptance Phase	
22.	Operations	SLA of the complete solution for a period of Five (05) years as defined in Schedule of Requirements, Technical Specification.	From the date of Operational Acceptance Certificate

The targeted/tentative Project Timeline is **18 (eighteen) Months** or earlier including Development, Installation, Configuration, User Acceptance Testing and Operational Acceptance of complete solution from the Date of Signing of Contract.

Seal & Signature of Bidder: _____

Date:

SECTION VI: STANDARD FORMS

TECHNICAL FORMS

Following should be the contents of the **Technical Proposal Envelope:**		
1.	Letter of Bid	Form T1
2.	Bidder Information	Form T2
3.	Affidavit for Bidder's Blacklisting Status	Form T3
4.	Declaration for Ultimate Beneficial Owners Information	Form T4
5.	Qualification Information	Form T5
6.	FIN Financial Situation and Performance	Form T6
7.	Annual Turnover (Annual Sales Value)	Form T7
8.	Manufacturer's Authorization	Form T8
9.	General Information Form	Form T9
10.	Details of Contracts of Similar Nature and Complexity	Form T10
11.	Bid Security	Form T11

Form T1 Letter of Bid

INSTRUCTIONS TO BIDDERS: (delete this box once you have completed the document)

Place this Letter of Bid in the first envelope "TECHNICAL PROPOSAL".

The Bidder must prepare the Letter of Bid on stationery with its letterhead clearly showing the Bidder's complete name and business address.

Date of this Bid submission: **Monday, 24 February 2025**
IFB No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

To: **SBP Banking Services Corporation (HOK)**

We, the undersigned Bidder, hereby submit our Bid, in two parts, namely:

(a) the Technical Proposal, and
(b) the Financial Proposal.

In submitting our Bid we make the following declarations:

(a) **No reservations:** We have examined and have no reservations to the bidding document, including addenda issued in accordance with Instructions to Bidders (ITB 9);
(b) **Eligibility**: We meet the eligibility requirements and have no conflict of interest in accordance with ITB 3;
(c) **Bid/Proposal-Securing Declaration**: We have not been suspended nor declared ineligible by the Procuring Agency based on execution of a Bid Securing Declaration or Proposal Securing Declaration in the Procuring Agency's country in accordance with ITB 4;
(d) **Conformity:** We offer to supply in conformity with the bidding document and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods: *Supply, Development, Implementation, Integration and Technical Support of Currency Management System;*
(e) **Bid Validity Period**: Our Bid shall be valid for the period specified in **BDS 17.1** (as amended, if applicable) from the date fixed for the Bid submission deadline specified in **BDS 23.1** (as amended, if applicable), and it shall remain binding upon us, and may be accepted at any time before the expiration of that period;

(f) **Performance Guarantee**: If our Bid is accepted, we commit to obtain a performance security in accordance with the bidding document;

(g) **One Bid per Bidder**: We are not submitting any other Bid(s) as an individual Bidder, and we are not participating in any other bid(s) as a Joint Venture member or as a subcontractor, and meet the requirements, other than Alternative Bids submitted in accordance with **ITB 19**;

(h) **Suspension and Debarment**: We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Procuring Agency. Further, we are not ineligible under Pakistan laws;

(i) **State-owned enterprise or institution**: [*select the appropriate option and delete the other*] [*We are not a state-owned enterprise or institution*] / [*We are a state-owned enterprise or institution but meet the requirements of*];

(j) **Binding Contract**: We understand that this Bid, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;

(k) **Not Bound to Accept**: We understand that you are not bound to accept the Most Advantageous Bid or any other Bid that you may receive; and

(l) **Fraud and Corruption**: We hereby certify that we have taken steps to ensure that no person acting for us, or on our behalf, engages in any type of Fraud and Corruption.

Name of the Bidder: [*insert complete name of Bidder*]

Name of the person duly authorized to sign the Bid on behalf of the Bidder: ** [*insert complete name of person duly authorized to sign the Bid*]

Title of the person signing the Bid: [*insert complete title of the person signing the Bid*]

Signature of the person named above: [*insert signature of person whose name and capacity are shown above*]

Date signed [*insert date of signing*] **day of** [*insert month*], [*insert year*]

**: Person signing the Bid shall have the power of attorney given by the Bidder. The power of attorney shall be attached with the Bid Schedules.

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form T2 Bidder Information

[The Bidder shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

1. Bidder's Name *[insert Bidder's legal name]*
2. Bidder's actual or intended country of registration: *[insert actual or intended country of registration]*
3. Bidder's year of registration: *[insert Bidder's year of registration]*
4. Bidder's Address in country of registration: *[insert Bidder's legal address in country of registration]*
5. Bidder's Authorized Representative Information Name: *[insert Authorized Representative's name]* Address: *[insert Authorized Representative's Address]* Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]* Email Address: *[insert Authorized Representative's email address]*
6. Attached are copies of original documents of *[check the box(es) of the attached original documents]* ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above. ☐ Establishing that the Bidder is not under the supervision of the Procuring Agency 7. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form T3 Affidavit for Bidder's Blacklisting Status

IFB No: GSD (PROC-I)/186615/Supply/CMS/2024
Title: Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Bidder: _____

[Required on non-judicial stamp paper; value of stamp paper should be as per required value as per Stamp Duty Act]

To:

Director
General Services Department
SBP Banking Services Corporation (HOK)
4th Floor BSC House, I.I Chundrigar Road,
Karachi –Pakistan

Affidavit for Bidder's Blacklisting Status

Dear Sir,

I/We hereby confirm and declare that I/We, M/s _____has/have not been Blacklisted/Sanctioned by any Federal or Provincial Government Department, National Counter Terrorism Authority(NACTA), Agency, Organization or Autonomous Body anywhere in Pakistan during last 05 (five) years.

I/We M/s _____ hereby confirm and declare that the goods/services from Indian or Israeli origin or imported from India or Israel will not provided for Supply, Development, Implementation, Integration and Technical Support of Currency Management System vide GSD (PROC-I)/186615/Supply/CMS/2024.

I/We M/s _____ hereby also confirm and declare that no backdoor or eavesdropping or remote access mechanism is present for Supply, Development, Implementation, Integration and Technical Support of Currency Management System vide GSD (PROC-I)/186615/Supply/CMS/2024 from India or Israel. Identification of avenues for unauthorized access / data leakage at any stage may lead to cancellation of Contract along with blacklisting of the undersigned entity by SBP Banking Services Corporation.

Detection of false declaration / statement at any stage of the entire Bidding Process / Currency of the Contract shall lead to Disqualification and forfeiture of Bid Security and/or Performance Guarantee and termination of contract.

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form T4 Declaration for Ultimate Beneficial Owners Information

IFB No: GSD (PROC-I)/186615/Supply/CMS/2024
Title: Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Bidder:

[Required on non-judicial stamp paper; value of stamp paper should be as per required value as per Stamp Duty Act]

1. Name
2. Father's Name/Spouse's Name
3. CNIC/NICOP/Passport no.
4. Nationality
5. Residential address
6. Email address
7. Date on which shareholding, control or interest acquired in the business.
8. In case of indirect shareholding, control or interest being exercised through intermediarycompanies, entities or other legal persons or legal arrangements in the chain of ownership or control, following additional particulars to be provided:

1	2	3	4	5	6	7	8	9	10
Name	Legal form (Company/Limited Liability Partnership/Association ofPersons/Single Member Company/ Partnership Firm/ Trust/Any other individual,body corporate (to be specified))	Date of incorporation/ registration	Name of registering authority	Business Address	Country	Email address	Percentage of shareholding,control or interest of BO in the legal person or legal arrangement	Percentage of shareholding,control or interest of legal person or legal arrangement in the Company	Identity of Natural Person who ultimately owns or controls the legal personor arrangement

9. Information about the Board of Directors (details shall be provided regarding number ofshares in the capital of the company as set opposite respective names).

1	2	3	4	5	6	7	8

Name and surname (In Block Letters)	CNIC No. (in case of foreigner, Passport No)	Father's/ Husband's Name in full	Current Nationality	Any other Nationality (ies)	Occupation	Residential address in full or the registered/ principal office address for a subscriber other than natural person	Number of shares taken by each subscriber (in figures and words)
			Total number of shares taken (in figures and words)				

10. Any other information incidental to or relevant to Beneficial Owner(s).

Name & signature
(Person authorized to issue notice on behalf of the company)

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form T5 Qualification Information

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

1. Individual Bidder	1.1 Constitution or legal status of Bidder: *[attach copy]* Place of registration: *[insert]* Principal place of business: *[insert]* Power of attorney of signatory of Bid: *[attach]* 1.2 Total annual volume of Supplies delivered ***(during last 03)*** years. 1.3 Services performed as prime Supplier on the provision of Services of a similar nature and volume over the last ***(during last 03)*** years. The values should be indicated in the same currency used for Item 1.2 above. Also list details of work under way or committed, including expected completion date.

#	Project Description	Name of Procuring Agency and contact person	Type of Supplies provided and year of completion	Value of Contract

1.4 Major items of Supplier's Equipment proposed for carrying out the Services. List all information requested below. Refer also to ITB 13.3(c).

#	Item of equipment	Description, make, and age (years)	Condition (new, good, poor) and number available	Owned, leased (from whom?), or to be purchased (from whom?)

	1.5 Qualifications and experience of key personnel proposed for administration and execution of the Contract. Attach biographical data. Refer also to ITB 13.3(d).

#	Position	Name	Years of experience (general)	Years of experience in proposed position

	1.6 Proposed sub-contracts and firms involved. Refer to GCC 18.

#	Sections of the Services	Value of Sub-contract	Sub-contractor	Sections of the Services

	1.7 Financial reports for the last ***(during 03)*** years: balance sheets, profit and loss statements, auditors' reports, etc. List below and attach copies. 1.8 Evidence of access to financial resources to meet the qualification requirements: cash in hand, lines of credit, etc. List below and attach copies of support documents. We certify/confirm that we comply with eligibility requirements as per ITB 3 of the bidding documents. 1.9 Name, address, and telephone, telex, and facsimile numbers of banks that may provide references if contacted by the Procuring Agency. 1.10 Information regarding any litigation, current or within the last *(insert period)* years, in which the Bidder is or has been involved.

#	Other party(ies)	Cause of dispute	Details of litigation award	Amount involved

	1.11 Information regarding Occupation Health and Safety Policy and Safety Records of the Bidder. 1.12 Statement of compliance with the requirements of ITB 3.4. 1.13 Proposed Program (service work method and schedule). Descriptions, drawings, and charts, as necessary, to comply with the requirements of the bidding documents.
2. Additional Requirements	2.1 Bidders should provide any additional information required in the Bid Data Sheet as delineated under **Table-Y** and to fulfill the requirements of ITB 12.1, if applicable.

Table-Y: Minimum Eligibility / Qualification Criteria				
#	**Eligibility / Qualification Criteria**	**Means of Verifications**	**Reference in Bid**	**Bidder's Assessment (Yes/No)**
a)	Bidder must be a Principal Software Firm (PSF) or an Authorized Partner of the PSF;	In case of PSF, Firm / Company Registration is required. In case of PSF's Partner, PSF Certificate/ Letter / Web Reference as proof of being a valid authorized Partner of the PSF is required.		
b)	Bidder must have experience of at least 03 (three) implementations of Designing, Developing & Implementing Enterprise Level Software Solutions of comparable scale during last 10 (ten) years;	Sign-off / Project Completion Certificate along with client contact details including: - • Copy of Contracts or • Customer Reference Letters / Email with brief overview about the project scope		
c)	Bidder must have strength of at least 02 (two) Certified Project Management Professionals, 02 (two) Business Analysts and 10 (ten) Technical / Functional Resources with minimum experience of 05 (five) years of the quoted software development framework;	For **Certified Project Management Professionals**: - Provide PMP / CAPM / CPM etc. certification(s). (with at least 05-year Project Manager experience) For **Business Analysts**: - Provide CBAP / CCBA / PMI-PBA / relevant Business Analyst certification(s). (with at least 05-year Business Analyst experience) or Proof of at least 16 Years of relevant Qualification in Computer Science / IT / Business Administration / Engineering / Mathematics / Statistics. (with at least 05-year Business Analyst experience) For **Technical / Functional Resources**:- Provide CV / Resumes of Technical / Functional Resources (with at least 05-year experience in the quoted software development framework)		
d)	Bidder must have a verifiable service/support office in Karachi.	Provide the address and phone numbers of the Offices / Service Centers		
e)	Bidder must have Annual Sales Volume/Gross Turnover of at least PKR 500 Million in any of last 03 (three) years;	Copy of Audited Financial Statement		
f)	Bidder must be registered with Income Tax and Sales Tax Departments and must appear on Active Taxpayer List of FBR Pakistan;	Attach copies of valid NTN certificate, GST certificate and FBR Active tax payer list status		
g)	Bidder must not have been blacklisted or be in breach of performance with SBP or any Organization(s).	Provide affidavit as per Form T3		

We, the undersigned declare that the information contained in and attached to this form is true and accurate as of the date of bid submission

Authorized Signature:_____

Name and Title of Signatory: _____

Name of Bidder: _____

Address: _____

Form T6 FIN Financial Situation and Performance

[The following table shall be filled in for the Bidder]

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

1. Financial data

Type of Financial information in (currency)	**Historic information for previous _[insert number] years, [insert in words] (amount in currency, currency, exchange rate,)**				
	Year 1	Year 2	Year 3		
Statement of Financial Position (Information from Balance Sheet)					
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statement					
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

2. Financial documents

The Bidder and its parties shall provide copies of financial statements for *[number]* years pursuant Section III, Qualifications Criteria and Requirements. The financial statements shall:

(a) reflect the financial situation of the Bidder, and not an affiliated entity (such as parent company or group member).

(b) be independently audited or certified in accordance with local legislation.

(c) be complete, including all notes to the financial statements.

(d) correspond to accounting periods already completed and audited.

☐ Attached are copies of financial statements for the ***[03]*** years required above; and complying with the requirements.

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form T7 Annual Turnover (Annual Sales Value)

[The following table shall be filled in for the Bidder]

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

Annual turnover data			
Year	**Currency**	**Exchange rate**	**PKR equivalent**
[indicate calendar year]	*[indicate currency]*		

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form T8 Manufacturer's Authorization

Not Required

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

To: *[insert complete name of Procuring Agency]*

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of product]*, having Business Place at [insert full address of Manufacturer's factories], do hereby authorize *[insert complete name of Bidder]* (hereinafter, the "Bidder") to submit a bid and sign a Contract with you for resale of the following Products produced by us.

We hereby extend our full covenant with respect to the offered solution by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Dated on _____ day of _____, _____ *[insert date of signing]*

Form T9 General Information Form

All individual firms that are bidding must complete the information in this form. Nationality information should be provided for all owners or Bidders that are partnerships or individually owned firms.
Where the Bidder proposes to use named Subcontractors for highly specialized components of the Information System, the following information should also be supplied for the Subcontractor(s).

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

1.	Name of firm	
2.	Head office address	
3.	Telephone	Contact
4.	Fax	Telex
5.	Place of incorporation / registration	Year of incorporation / registration

Nationality of beneficial owners along with shares percentage			
Name		Nationality	Share Percentage
1.			
2.			
3.			
4.			
5.			
To be completed by all owners of partnerships or individually owned firms.			

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form T10 Details of Contracts of Similar Nature and Complexity

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

Name of Bidder :

Use a separate sheet for each contract.

1.	Number of contract	
	Name of contract	
	Country	
2.	Name of Procuring Agency	
3.	Procuring Agency address	
4.	Nature of Information Systems and special features relevant to the contract for which the Bidding Documents are issued	
5.	Contract role (check one) □Prime Supplier □ Management Contractor □ Subcontractor □ Partner in a Joint Venture	
6.	Amount of the total contract/subcontract/partner share (in specified currencies at completion, or at date of award for current contracts) Currency Currency Currency	
7.	Equivalent amount PKR Total contract: ___; Subcontract: _____; Partner share: _____;	
8.	Date of award/completion	
9.	Contract was completed _____ months ahead/behind original schedule (if behind, provide explanation).	
10.	Contract was completed PKR _____ equivalent under/over original contract amount (if over, provide explanation).	
11.	Special contractual/technical requirements.	
12.	Indicate the approximate percent of total contract value (and PKR amount) of Information System undertaken by subcontract, if any, and the nature of such Information System.	

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form T11 Bid Security

[The bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: SBP Banking Services Corporation

No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

Date: *[Insert date of issue]*

BID GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letterhead]*

Bid Security must be valid till: **11-Aug-25**

We have been informed that _____ *[insert name of the Bidder]* (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of _____ under Invitation for Bids No. **No.**: *GSD (PROC-I)/186615/Supply/CMS/2024*

Furthermore, we understand that, according to the Beneficiary's conditions, Bids must be supported by a Bid guarantee.

At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

(a) has withdrawn its Bid during the period of Bid validity set forth in the Applicant's Letter of Bid ("the Bid Validity Period"), or any extension thereto provided by the Applicant; or

(b) having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period or any extension thereto provided by the Applicant, (i) has failed to sign the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee will expire: (a) if the Applicant is the successful Bidder, upon our receipt of copies of the Contract signed by the Applicant and the performance security issued to the Beneficiary in relation to such Contract ; or (b) if the Applicant is not the successful Bidder, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Bidding process; or (ii) twenty-eight days after the end of the Bid Validity Period.

Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

_____

[Signature(s)]

FINANCIALS FORMS

Following should be the contents of the **Financial Proposal Envelope:**		
1.	Price Schedule Forms	Form F1
2.	Supply and Installation Cost Table	Form F2
3.	Recurrent Cost Sub-Table	Form F3
4.	Grand Summary Cost Table	Form F4

Form F1 Price Schedule Forms

(To be Part of Separately Sealed Financial Proposal Envelope)

[The Bidder shall fill in these Price Schedule Forms in accordance with the instructions indicated. In information systems procurement, the Contract Price (and payment schedule) should be linked as much as possible to achievement of operational capabilities, not just to the physical delivery of technology]

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

1. The Price Schedules are divided into separate Schedules as follows:
   i. Supply and Installation Cost Sub-Table(s)
   ii. Recurrent Cost Sub-Tables(s)
   iii. Grand Summary Cost Table
2. The Schedules do not generally give a full description of the information technologies to be supplied, installed, and operationally accepted, or the Services to be performed under each item. However, it is assumed that Bidders shall have read the Technical Requirements and other sections of these Bidding Documents to ascertain the full scope of the requirements associated with each item prior to filling in the rates and prices. The quoted rates and prices shall be deemed to cover the full scope of these Technical Requirements, as well as overhead and profit.
3. If Bidders are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with the Instructions to Bidders in the Bidding Documents prior to submitting their bid.

Pricing

4. Prices shall be filled in indelible ink, and any alterations necessary due to errors, etc., shall be initialed by the Bidder. As specified in the Bid Data Sheet, prices shall be fixed and firm for the duration of the Contract.
5. Bid prices shall be quoted in the manner indicated and in the currencies specified in ITB Clauses 15. Prices must correspond to items of the scope and quality defined in the Technical Requirements or elsewhere in these Bidding Documents.
6. The Bidder must exercise great care in preparing its calculations, since there is no opportunity to correct errors once the deadline for submission of bids has passed. A single error in specifying a unit price can therefore change a Bidder's overall total bid price substantially, make the bid noncompetitive, or subject the Bidder to possible loss. The Procuring Agency will correct any arithmetic error.
7. Payments will be made to the Supplier in the currency, method and conditions specified in the SCC 11 of the Contract.

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form F2 Supply and Installation Cost Table

As necessary for supply, installation, and achieving Operational Acceptance of the System, specify items in the Table below, modifying, deleting, or expanding the sample line items and sample table entries as needed. Costs MUST reflect prices and rates quoted in accordance with ITB Clauses 14 and 15.

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

#	Description	Cost *(in PKR)*	Tax *(in PKR)*		Amount *(in PKR)*
		C	%	Amount (T)	(C + T)
A	**One-time Cost of Solution (with Development and Implementation) *(in PKR)***				
1.	Currency Management System		18%		
2.	Database with Associated Components License(s)		18%		
	Total One-time Cost of Solution in PKR (A)				
B	**Training Charges *(in PKR)***	**Charges *(in PKR)* C**	**Tax *(in PKR)***		**Amount *(in PKR)* C+T**
			%	Amount (T)	
1.	System Administration Training of 10 Users		5%		
2.	System Development Training of 10 Users		5%		
3.	Super Users Functional Training of 40 Users		5%		
	Total Training Charges in PKR (B)				

Note: -

i. Bidder shall express its Bid in Pakistani Rupees (PKR).
ii. The prices should include the price of incidental services. No separate payment shall be made for the incidental services.
iii. Prices should be inclusive of all applicable taxes and duties.
iv. Before filling this form kindly read Section V: Schedule of Requirements, Technical Specification

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form F3 Recurrent Cost Sub-Table

C. 5 Years SLA Charges in PKR									
Region	**Year1**	**Year2**	**Year3**	**Year4**	**Year5**	**5 Year SLA Charges in PKR**	**Tax in PKR**		**Amount in PKR**
	Y1	Y2	Y3	Y4	Y5	Y1+Y2+Y3+Y4+Y5 **(S)**	**%**	**Amount (T)**	**(S+T)**
Sindh							15%		
							Total 05 Years SLA Charges in PKR		

Note:

i. Maintenance & Support / SLA Charges must be quoted in PKR

ii. The prices should include the price of incidental services. No separate payment shall be made for the incidental services.

iii. Prices should be inclusive of all applicable taxes and duties.

v. Before filling this form kindly read Section V: Schedule of Requirements, Technical Specification

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Form F4 Grand Summary Cost Table

Date: Monday, 24 February 2025
No.: *GSD (PROC-I)/186615/Supply/CMS/2024*
Title of Procurement: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

#	**Description**	**Amount** *(PKR)*
A	Total One-time Cost of Solution *(in PKR)*	
B	Total Training Charges *(in PKR)*	
C	Total 05 Years SLA Charges *(in PKR)*	
	Total Amount (A+B+C)	
Amount in Words (A+B+C):		

Name of Bidder:	
Authorized Signature with Stamp of Bidder:	

Part B
CONDITIONS OF CONTRACT AND CONTRACT FORMS

SECTION VII: GENERAL CONDITIONS OF THE CONTRACT

GENERAL CONDITIONS OF THE CONTRACT (GCC)

1.	***Definitions***	1.1	The following words and expressions shall have the meanings hereby assigned to them:	
			a)	**"Authority"** means Public Procurement Regulatory Authority.
			b)	The "**Arbitrator"** is the person appointed with mutual consent of both the parties, to resolve contractual disputes as provided for in the General Conditions of the Contract **GCC Clause 31** hereunder.
			c)	The **"Contract**" means the agreement entered into between the Procuring Agency and the Supplier, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
			d)	The "**Commencement Date"** is the date when the Supplier shall commence execution of the contract as specified in the **SCC.**
			e)	"**Completion**" means the fulfillment of the related services by the Supplier in accordance with the terms and conditions set forth in the contract.
			f)	**"Country of Origin"** means the countries and territories eligible under the PPRA Rules 2004 and its corresponding Regulations as further elaborated in the **SCC**.
			g)	The **"Contract Price"** is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
			h)	**"Effective Contract date"** is the date shown in the Certificate of Contract Commencement issued by the Procuring Agency upon fulfillment of the conditions precedent stipulated in **GCC Clause 5.**
			i)	**"Procuring Agency"** means the person named as Procuring Agency in the **SCC** and the legal successors in title to this person, procuring the Goods and related service, as named in **SCC.**
			j)	**"Related Services"** means those services ancillary to the delivery of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, initial maintenance and other such obligations of the Supplier covered under the Contract.
			k)	**"GCC**" means the General Conditions of Contract contained in this section.
			l)	"**Intended Delivery Date"** is the date on which it is intended that the Supplier shall effect delivery as specified in the **SCC.**
			m)	"**Information System**," also called "the System," means all the Information Technologies, Materials, and other Goods to be supplied, installed, integrated, and made operational (exclusive of the

				Supplier's Equipment), together with the Services to be carried out by the Supplier under the Contract
			n)	**"SCC"** means the Special Conditions of Contract.
			o)	"**Supplier**" means the individual private or government entity or a combination of the above whose Bid to perform the contract has been accepted by the Procuring Agency and is named as such in the Contract, and includes the legal successors or permitted assigns of the supplier and shall be named in the **SCC**.
			p)	**"Project Name**" means the name of the project stated in **SCC**.
			q)	**"Day"** means calendar day.
			r)	**"Eligible Country"** means the countries and territories eligible for participation in accordance with the policies of the Federal Government.
			s)	**"End User"** means the organization(s) where the goods will be used, as named in the **SCC**.
			t)	**"Origin"** means the place where the Goods were mined, grown, or produced or from which the Services are supplied. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially recognized new produce results that is substantially different in basic characteristics or in purpose or utility from its components.
			u)	"**Force** Majeure" means an unforeseeable event which is beyond reasonable control of either Party and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances. For the purposes of this Contract, **"Force Majeure"** means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances. and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood, epidemics, or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent), confiscation or any other action by Government agencies.
			v)	**"Specification"** means the Specification of the Goods and performance of incidental services in accordance with the relevant standards included in the Contract and any modification or addition made or approved by the Procuring Agency.
			w)	The Supplier's Bid is the completed Bid document submitted by the Supplier to the Procuring Agency.
2.	***Application and interpretation***	2.1	These General Conditions shall apply to the extent that they are not superseded by provisions of other parts of the Contract.	

		2.2	In interpreting these Conditions of Contract headings and marginal notes are used for convenience only and shall not affect their interpretations unless specifically stated; references to singular include the plural and vice versa; and masculine include the feminine. Words have their ordinary meaning under the language of the Contract unless specifically defined.
		2.3	The documents forming the Contract shall be interpreted in the following order of priority: i. Appendix -1 Bid Acceptance Letter ii. Appendix -2 Supplier Acceptance Letter iii. Appendix-3 Supplier's Representative iv. Appendix-4 Technical Specifications v. Appendix-5 Schedule of Requirements; vi. Appendix-6 Form of Bid & Price Schedule vii. Appendix-7 Payment Schedule viii. Appendix-8 Supplier Account Form (S2) ix. Appendix -9 Performance Guarantee (Bank Guarantee) x. Appendix -10 Integrity Pact xi. Appendix-11 Declaration for Beneficial Ownership xii. Appendix-12 Sample Forms of the Contract 1. I. Sample Approval Certificate 2. II. Delivery Confirmation Certificate 3. III. Installation Certificate Form 4. IV. Operational Acceptance Certificate Form xiii. Appendix-13. The Supplier's Bid
3.	***Conditions Precedent***	3.1	Having signed the Contract, it shall come into effect on the date on which the following conditions have been satisfied: - a) Submission of performance Security (or guarantee) in the form specified in the **SCC**; b) Furnishing of Advance Payment Unconditional Guarantee.
		3.2	If the Condition precedent stipulated on GCC Clause 3.1 is not met by the date specified in the SCC this contract shall not come into effect;
		3.3	If the Procuring Agency is satisfied that each of the conditions precedent in this contract has been satisfied (except to the extent waved by him, but subject to such conditions as he shall impose in respect of such waiver) he shall promptly issue to the supplier a certificate of Contract commencement, which shall confirm the start date.
4.	***Governing Language***	4.1	The Contract as all correspondence and documents relating to the contract exchanged by the Supplier and the Procuring Agency shall be written in the language specified in **SCC**. Subject to **GCC Clause 3.1**, the transaction of the Contract written in the specified language shall govern its interpretation.
5.	***Applicable Law and Effectiveness of the contract***	5.1	The contract shall be governed and interpreted in accordance with the laws of Pakistan, unless otherwise specified in **SCC.**

		5.2	The Contract shall be effective from the date specified in the SCC,
6.	***Country of Origin***	6.1	The origin of goods and services making information systems may be distinct from the nationality of the Supplier.
7.	***Scope of the Information System***	7.1	Unless otherwise expressly limited in the SCC or Technical Requirements, the Supplier's obligations cover the provision of all Information Technologies, Materials and other Goods as well as the performance of all Services required for the design, development, and implementation (including procurement, quality assurance, assembly, associated site preparation, Delivery, Pre-commissioning, Installation, Testing, and Commissioning) of the System, in accordance with the plans, procedures, specifications, drawings, codes, and any other documents specified in the Contract and the Agreed and Finalized Project Plan
		7.2	The Supplier shall, unless specifically excluded in the Contract, perform all such work and / or supply all such items and Materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Operational Acceptance of the System as if such work and / or items and Materials were expressly mentioned in the Contract.
		7.3	The Supplier's obligations (if any) to provide Goods and Services as implied by the Recurrent Cost tables of the Supplier's bid, such as consumables, spare parts, and technical services (e.g., maintenance, technical assistance, and operational support), are as specified in the SCC, including the relevant terms, characteristics, and timings
8.	***Supplier's Responsibilities***	8.1	The Supplier shall conduct all activities with due care and diligence, in accordance with the Contract and with the skill and care expected of a competent provider of information technologies, information systems, support, maintenance, training, and other related services, or in accordance with best industry practices. In particular, the Supplier shall provide and employ only technical personnel who are skilled and experienced in their respective callings and supervisory staff who are competent to adequately supervise the work at hand.
		8.2	The Supplier confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the System provided by the Procuring agency and on the basis of information that the Supplier could have obtained from a visual inspection of the site (if access to the site was available) and of other data readily available to the Supplier relating to the System as at the date Seven (07) days prior to bid submission. The Supplier acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Contract
		8.3	The Supplier shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach a mutually Agreed and Finalized Project Plan within the time schedule specified in the Implementation Schedule in the Technical Requirements Section. Failure to provide such resources, information, and decision making may constitute grounds for termination.

		8.4	The Supplier shall acquire in its name all permits, approvals, and/or licenses from all local, state, or national government authorities or public service undertakings in the Procuring agency's Country that are necessary for the performance of the Contract, including, without limitation, visas for the Supplier's and Subcontractor's personnel and entry permits for all imported Supplier's Equipment. The Supplier shall acquire all other permits, approvals, and/or licenses that are not the responsibility of the Procuring agency and that are necessary for the performance of the Contract.
		8.5	The Supplier shall comply with all laws in force in the Procuring agency's Country. The laws will include all national, provincial, municipal, or other laws that affect the performance of the Contract and are binding upon the Supplier. The Supplier shall indemnify and hold harmless the Procuring agency from and against any and all liabilities, damages, claims, fines, penalties, and expenses of whatever nature arising or resulting from the violation of such laws by the Supplier or its personnel, including the Subcontractors and their personnel, but without prejudice to GCC Clause 9.1. The Supplier shall not indemnify the Procuring agency to the extent that such liability, damage, claims, fines, penalties, and expenses were caused or contributed to by a fault of the Procuring agency.
		8.6	The Supplier shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs, and all local laws and regulations pertaining to the employment of labor.
		8.7	Any Information Technologies or other Goods and Services that will be incorporated in or be required for the System and other supplies shall have their Origin in a country that shall be an Eligible Country.
		8.8	The Supplier shall permit the Procuring Agency and/or persons appointed by the Procuring Agency to inspect the Supplier's offices and/or the accounts and records of the Supplier and its sub-contractors relating to the performance of the Contract, and to have such accounts and records audited by auditors.
		8.9	Other Supplier responsibilities, if any, are as stated in the SCC.
9.	***Procuring Agency's Responsibility***	9.1	The Procuring Agency shall ensure the accuracy of all information and/or data to be supplied by the Procuring agency to the Supplier, except when otherwise expressly stated in the Contract.
		9.2	The Procuring agency shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach an Agreed and Finalized Project Plan (pursuant to GCC Clause 17) within the time schedule specified in the Implementation Schedule in the Technical Requirements Section. Failure to provide such resources, information, and decision making may constitute grounds for Termination pursuant to GCC Clause 41.

		9.3	The Procuring agency shall be responsible for acquiring and providing legal and physical possession of the site and access to it, and for providing possession of and access to all other areas reasonably required for the proper execution of the Contract.
		9.4	If requested by the Supplier, the Procuring agency shall use its best endeavors to assist the Supplier in obtaining in a timely and expeditious manner all permits, approvals, and/or licenses necessary for the execution of the Contract from all local, state, or national government authorities or public service undertakings that such authorities or undertakings require the Supplier or Subcontractors or the personnel of the Supplier or Subcontractors, as the case may be, to obtain.
		9.5	In such cases where the responsibilities of specifying and acquiring or upgrading telecommunications and/or electric power services falls to the Supplier, as specified in the Technical Requirements, SCC, Agreed and Finalized Project Plan, or other parts of the Contract, the Procuring agency shall use its best endeavors to assist the Supplier in obtaining such services in a timely and expeditious manner.
		9.6	The Procuring agency shall be responsible for timely provision of all resources, access, and information necessary for the Installation and Operational Acceptance of the System (including, but not limited to, any required telecommunications or electric power services), as identified in the Agreed and Finalized Project Plan, except where provision of such items is explicitly identified in the Contract as being the responsibility of the Supplier. Delay by the Procuring agency may result in an appropriate extension of the Time for Operational Acceptance, at the Supplier's discretion
		9.7	Unless otherwise specified in the Contract or agreed upon by the Procuring agency and the Supplier, the Procuring agency shall provide sufficient, properly qualified operating and technical personnel, as required by the Supplier to properly carry out Delivery, Pre-commissioning, Installation, Commissioning, and Operational Acceptance, at or before the time specified in the Technical Requirements Section's Implementation Schedule and the Agreed and Finalized Project Plan.
		9.8	The Procuring agency will designate appropriate staff for the training courses to be given by the Supplier and shall make all appropriate logistical arrangements for such training as specified in the Technical Requirements, SCC, the Agreed and Finalized Project Plan, or other parts of the Contract.

		9.9	The Procuring agency assumes primary responsibility for the Operational Acceptance Test(s) for the System, in accordance with GCC Clause 26, and shall be responsible for the continued operation of the System after Operational Acceptance. However, this shall not limit in any way the Supplier's responsibilities after the date of Operational Acceptance otherwise specified in the Contract.	
		9.10	The Procuring agency is responsible for performing and safely storing timely and regular backups of its data and Software in accordance with accepted data management principles, except where such responsibility is clearly assigned to the Supplier elsewhere in the Contract.	
		9.11	Other Procuring agency responsibilities, if any, are as stated in the SCC.	
10.	***Prices***	10.1	The contract price shall be as specified in the Contract Subject to any additions and adjustments thereto or deductions there from, as may be made pursuant to the Contract.	
		10.2	Prices charged by the Supplier for Information System under the Contract shall not vary from the prices quoted by the Supplier in its Bid, with the exception of any price adjustments authorized in SCC or in the Procuring Agency's request for Bid Validity extension, as the case may be.	
11.	***Payment***	11.1	The method and conditions of payment to be made to the Supplier under this Contract shall be specified in **SCC**.	
		11.2	The Supplier's request(s) for payment shall be made to the Procuring Agency in writing or in electronic forms that provide record of the content of communication, accompanied by an invoice describing, as appropriate, the Goods delivered and Services performed, and by documents submitted, and upon fulfillment of other obligations stipulated in the Contract.	
		11.3	Payments shall be made promptly by the Procuring Agency, within sixty (60) days after submission of an invoice or claim by the Supplier. If the Procuring Agency makes a late payment, the Supplier shall be paid interest on the late payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the rate as specified in the **SCC.**	
		11.4	The currency or currencies in which payment is made to the Supplier under this Contract shall be specified in **SCC** subject to the following general principle: payment will be made in the currency or currencies in which the payment has been requested in the Supplier's Bid.	
		11.5	All payments shall be made in the currency or currencies specified in the **SCC** pursuant to **GCC Clause 11.4**	
12.	***Performance Guarantee***	12.1	The proceeds of the Performance Security (or Guarantee) shall be payable to the Procuring Agency as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.	
		12.2	The Performance Guarantee shall be in one of the following forms:	
			a)	A bank guarantee, an irrevocable letter of credit issued by a reputable bank, or in the form provided in the Bidding Documents or another form acceptable to the Procuring Agency; or
			b)	A cashier's or certified check.

		12.3	The performance guarantee will be discharged by the Procuring Agency and returned to the Supplier not later than thirty (30) days following the date of completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless otherwise specified in **SCC**.
13.	***Taxes and Duties***	13.1	A foreign Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside Pakistan.
		13.2	If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in Pakistan the Procuring Agency shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.
		13.3	A local Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until the supply of the information system to the Procuring Agency.
14.	***Copy Rights***	14.1	The Intellectual Property Rights in all Standard Software and Standard Materials shall remain vested in the owner of such rights.
		14.2	The Procuring agency agrees to restrict use, copying, or duplication of the Standard Software and Standard Materials in accordance with GCC Clause 16, except those additional copies of Standard Materials may be made by the Procuring agency for use within the scope of the project of which the System is a part, in the event that the Supplier does not deliver copies within thirty (30) days from receipt of a request for such Standard Materials
		14.3	The Procuring agency's contractual rights to use the Standard Software or elements of the Standard Software may not be assigned, licensed, or otherwise transferred voluntarily except in accordance with the relevant license agreement or as may be otherwise specified in the SCC
		14.4	As applicable, the Procuring agency's and Supplier's rights and obligations with respect to Custom Software or elements of the Custom Software, including any license agreements, and with respect to Custom Materials or elements of the Custom Materials, are specified in the SCC. Subject to the SCC, the Intellectual Property Rights in all Custom Software and Custom Materials specified in the Contract Agreement (if any) shall, at the date of this Contract or on creation of the rights (if later than the date of this Contract), vest in the Procuring agency. The Supplier shall do and execute or arrange for the doing and executing of each necessary act, document, and thing that the Procuring agency may consider necessary or desirable to perfect the right, title, and interest of the Procuring agency in and to those rights. In respect of such Custom Software and Custom Materials, the Supplier shall ensure that the holder of a moral right in such an item does not assert it, and the Supplier shall, if requested to do so by the Procuring agency, and where permitted by applicable law, ensure that the holder of such a moral right waives it.
		14.5	The parties shall enter into such (if any) escrow arrangements in relation to the Source Code to some or all of the Software as are **specified in the SCC** and in **accordance with the SCC**

15.	***Software License Agreements***	15.1	Except to the extent that the Intellectual Property Rights in the Software vest in the Procuring agency, the Supplier hereby grants to the Procuring agency license to access and use the Software, including all inventions, designs, and marks embodied in the Software. Such license to access and use the Software shall: (a) be: (i) nonexclusive;
			(ii) fully paid up and irrevocable (except that it shall terminate if the Contract terminates under GCC Clauses 41; (iii) valid throughout the territory of the Procuring agency's Country (or such other territory as specified in the SCC); and (iv) subject to additional restrictions (if any) as specified in the SCC.
			b) permit the Software to be: (i) used or copied for use on or with the computer(s) for which it was acquired (if specified in the Technical Requirements and/or the Supplier's bid), plus a backup computer(s) of the same or similar capacity, if the primary is(are) inoperative, and during a reasonable transitional period when use is being transferred between primary and backup; (ii) as specified in the SCC, used or copied for use on or transferred to a replacement computer(s), (and use on the original and replacement computer(s) may be simultaneous during a reasonable transitional period) provided that, if the Technical Requirements and/or the Supplier's bid specifies a class of computer to which the license is restricted and unless the Supplier agrees otherwise in writing, the replacement computer(s) is(are) within that class; (iii) if the nature of the System is such as to permit such access, accessed from other computers connected to the primary and/or backup computer(s) by means of a local or wide-area network or similar arrangement, and used on or copied for use on those other computers to the extent necessary to that access;

			(iv) reproduced for safekeeping or backup purposes; (v) customized, adapted, or combined with other computer software for use by the Procuring agency, provided that derivative software incorporating any substantial part of the delivered, restricted Software shall be subject to same restrictions as are set forth in this Contract; (vi) as specified in the SCC, disclosed to, and reproduced for use by, support service suppliers and their subcontractors, (and the Procuring agency may sublicense such persons to use and copy for use the Software) to the extent reasonably necessary to the performance of their support service contracts, subject to the same restrictions as are set forth in this Contract; and
			(vii) disclosed to, and reproduced for use by, the Procuring agency and by such other persons as are specified in the SCC (and the Procuring agency may sublicense such persons to use and copy for use the Software), subject to the same restrictions as are set forth in this Contract.
		15.2	The Standard Software may be subject to audit by the Supplier, in accordance with the terms **specified in the SCC,** to verify compliance with the above license agreements.
16.	***Confidential Information***	16.1	Except if otherwise specified in the SCC, the "Receiving Party" (either the Procuring agency or the Supplier) shall keep confidential and shall not, without the written consent of the other party to this Contract ("the Disclosing Party"), divulge to any third party any documents, data, or other information of a confidential nature ("Confidential Information") connected with this Contract, and furnished directly or indirectly by the Disclosing Party prior to or during performance, or following termination, of this Contract.
		16.2	For the purposes of GCC Clause 16.1, the Supplier is also deemed to be the Receiving Party of Confidential Information generated by the Supplier itself in the course of the performance of its obligations under the Contract and relating to the businesses, finances, suppliers, employees, or other contacts of the Procuring agency or the Procuring agency's use of the System.

		16.3	Notwithstanding GCC Clauses 16.1 and 16.2: (a) the Supplier may furnish to its Subcontractor Confidential Information of the Procuring agency to the extent reasonably required for the Subcontractor to perform its work under the Contract; and (b) the Procuring agency may furnish Confidential Information of the Supplier: (i) to its support service suppliers and their subcontractors to the extent reasonably required for them to perform their work under their support service contracts; and (ii) to its affiliates and subsidiaries, in which event the Receiving Party shall ensure that the person to whom it furnishes Confidential Information of the Disclosing Party is aware of and abides by the Receiving Party's obligations under this GCC Clause 16 as if that person were party to the Contract in place of the Receiving Party.
		16.4	The Procuring agency shall not, without the Supplier's prior written consent, use any Confidential Information received from the Supplier for any purpose other than the operation, maintenance and further development of the System. Similarly, the Supplier shall not, without the Procuring agency's prior written consent, use any Confidential Information received from the Procuring agency for any purpose other than those that are required for the performance of the Contract.
		16.5	The obligation of a party under GCC Clauses 16.1 through 16.4 above, however, shall not apply to that information which: (a) now or hereafter enters the public domain through no fault of the Receiving Party; (b) can be proven to have been possessed by the Receiving Party at the time of disclosure and that was not previously obtained, directly or indirectly, from the Disclosing Party; (c) otherwise lawfully becomes available to the Receiving Party from a third party that has no obligation of confidentiality.
		16.6	The above provisions of this GCC Clause 16 shall not in any way modify any undertaking of confidentiality given by either of the parties to this Contract prior to the date of the Contract in respect of the System or any part thereof.
		16.7	The provisions of this GCC Clause 16 shall survive the termination, for whatever reason, of the Contract for three (3) years or such longer period as may be specified in the SCC.
17.	***Project Plan***	17.1	In close cooperation with the Procuring agency and based on the Preliminary Project Plan included in the Supplier's bid, the Supplier shall develop a Project Plan encompassing the activities specified in the Contract. The contents of the Project Plan shall be as specified in the SCC and/or Technical Requirements.
		17.2	The Supplier shall formally present to the Procuring agency the Project Plan in accordance with the procedure specified in the SCC

		17.3	If required, the impact on the Implementation Schedule of modifications agreed during finalization of the Agreed and Finalized Project Plan shall be incorporated in the Contract by amendment, in accordance with GCC Clauses 35.
		17.4	The Supplier shall undertake to supply, install, test, and commission the System in accordance with the Agreed and Finalized Project Plan and the Contract
		17.5	The Progress and other reports **specified in the SCC** shall be prepared by the Supplier and submitted to the Procuring agency in the format and frequency specified in the Technical Requirements.
18.	***Sub-contracting***	18.1	List of Approved Subcontractors to the Contract Agreement specifies critical items of supply or services and a list of Subcontractors for each item that are considered acceptable by the Procuring agency. If no Subcontractors are listed for an item, the Supplier shall prepare a list of Subcontractors it considers qualified and wishes to be added to the list for such items. The Supplier may from time to time propose additions to or deletions from any such list. The Supplier shall submit any such list or any modification to the list to the Procuring agency for its approval in sufficient time so as not to impede the progress of work on the System. The Procuring agency shall not withhold such approval unreasonably. Such approval by the Procuring agency of a Subcontractor(s) shall not relieve the Supplier from any of its obligations, duties, or responsibilities under the Contract
		18.2	The Supplier may, at its discretion, select and employ Subcontractors for such critical items from those Subcontractors listed pursuant to GCC Clause 18.1. If the Supplier wishes to employ a Subcontractor not so listed, or subcontract an item not so listed, it must seek the Procuring agency's prior approval under GCC Clause 18.3.
		18.3	For items for which pre-approved Subcontractor lists have not been specified in Appendix to the Contract Agreement, the Supplier may employ such Subcontractors as it may select, provided: (i) the Supplier notifies the Procuring agency in writing at least twenty-eight (28) days prior to the proposed mobilization date for such Subcontractor; and (ii) by the end of this period either the Procuring agency has granted its approval in writing or fails to respond. The Supplier shall not engage any Subcontractor to which the Procuring agency has objected in writing prior to the end of the notice period. The absence of a written objection by the Procuring agency during the above specified period shall constitute formal acceptance of the proposed Subcontractor. Except to the extent that it permits the deemed approval of the Procuring agency of Subcontractors not listed in the Contract Agreement, nothing in this Clause, however, shall limit the rights and obligations of either the Procuring agency or Supplier as they are specified in GCC Clauses 18.1 and 18.2, in the SCC, or in Appendix of the Contract Agreement.
19.	***Procurement and Delivery***	19.1	Subject to related Procuring agency's responsibilities pursuant to GCC Clause 9, the Supplier shall manufacture or procure and transport all the Information Technologies, Materials, and other Goods in an expeditious and orderly manner to the Project Site

		19.2	Delivery of the Information Technologies, Materials, and other Goods shall be made by the Supplier in accordance with the Technical Requirements
		19.3	Early or partial deliveries require the explicit written consent of the Procuring agency, which consent shall not be unreasonably withheld.
20.	***Transportation***	20.1	The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during shipment. The packing, marking, and documentation within and outside the packages shall comply strictly with the Procuring agency's instructions to the Supplier.
		20.2	The Supplier will bear responsibility for and cost of transport to the Project Sites in accordance with the terms and conditions used in the specification of prices in the Price Schedules, including the terms and conditions of the associated Incoterms.
		20.3	Unless otherwise specified in the SCC, the Supplier shall be free to use transportation through carriers registered in any eligible country and to obtain insurance from any eligible source country.

21.	***Documents***	21.1	Unless otherwise **specified in the SCC,** the Supplier will provide the Procuring agency with shipping and other documents, as specified below; (i) For Goods supplied from outside the Procuring agency's Country: Upon shipment, the Supplier shall notify the Procuring agency and the insurance company contracted by the Supplier to provide cargo insurance by telex, cable, facsimile, electronic mail, or EDI with the full details of the shipment. The Supplier shall promptly send the following documents to the Procuring agency by mail or courier, as appropriate, with a copy to the cargo insurance company: (a) two copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount; (b) usual transportation documents; (c) insurance certificate; (d) certificate(s) of origin; and (e) estimated time and point of arrival in the Procuring agency's Country and at the site. (ii) For Goods supplied locally (i.e., from within the Procuring agency's country): Upon shipment, the Supplier shall notify the Procuring agency by telex, cable, facsimile, electronic mail, or EDI with the full details of the shipment. The Supplier shall promptly send the following documents to the Procuring agency by mail or courier, as appropriate: (a) two copies of the Supplier's invoice showing the Goods' description, quantity, unit price, and total amount; (b) delivery note, railway receipt, or truck receipt; (c) certificate of insurance; (d) certificate(s) of origin; and (e) estimated time of arrival at the site.
22.	***Product Upgrades***	22.1	At any point during performance of the Contract, should technological advances be introduced by the Supplier for Information Technologies originally offered by the Supplier in its bid and still to be delivered, the Supplier shall be obligated to offer to the Procuring agency the latest versions of the available Information Technologies having equal or better performance or functionality at the same or lesser unit prices.

		22.2	At any point during performance of the Contract, for Information Technologies still to be delivered, the Supplier will also pass on to the Procuring agency any cost reductions and additional and/or improved support and facilities that it offers to other clients of the Supplier in the Procuring agency's Country.
		22.3	During performance of the Contract, the Supplier shall offer to the Procuring agency all new versions, releases, and updates of Standard Software, as well as related documentation and technical support services, within thirty (30) days of their availability from the Supplier to other clients of the Supplier in the Procuring agency's Country, and no later than twelve (12) months after they are released in the country of origin. In no case will the prices for these Software exceed those quoted by the Supplier in the Recurrent Costs tables in its bid.
23.	***Inspections and Test***	23.1	The Procuring Agency or its representative shall have the right to inspect and /or to test the components of the system to confirm their conformity to the Contract specifications at no extra cost to the Procuring Agency. **SCC** and the Technical Specifications shall specify what inspections and tests the Procuring Agency shall notify the Supplier in writing or in electronic forms that provide record of the content of communication, in a timely manner, of the identity of any representatives retained for these purposes.
		23.2	The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring Agency.
		23.3	Should any inspected or tested component fail to conform to the Specifications, the Procuring Agency may reject the component, and the Supplier shall replace the rejected component to meet specification requirements free of cost to the Procuring Agency.
		23.4	The Procuring Agency's right to inspect, test and, where necessary, reject component after' arrival in the Procuring Agency's country shall in no way be limited or eared by reason of the component having previously been inspected, tested, and passed by the Procuring Agency or its representative prior to the shipment from the country of origin.
		23.5	The Procuring Agency may require the Supplier to carry out any inspection and/or test not specified in the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such inspection and/or test shall be added to the Contract Price. Further, if such inspection and/or test impedes the progress of work on the System and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Achieving Operational Acceptance and the other obligations so affected

		23.6	If any dispute shall arise between the parties in connection with or caused by an inspection and/or with regard to any component to be incorporated in the System that cannot be settled amicably between the parties within a reasonable period of time, either party may invoke the process, starting with referral of the matter to the Adjudicator in case an Adjudicator is included and named in the Contract Agreement.
24.	***Installation of the System***	24.1	As soon as the System, or any Subsystem, has, in the opinion of the Supplier, been delivered, pre-commissioned, and made ready for Commissioning and Operational Acceptance Testing in accordance with the Technical Requirements, the SCC and the Agreed and Finalized Project Plan, the Supplier shall so notify the Procuring agency in writing
		24.2	The Project Manager shall, within fourteen (14) days after receipt of the Supplier's notice under GCC Clause 24.1, either issue an Installation Certificate in the form specified in the Sample Forms Section in the Bidding Documents, stating that the System, or major component or Subsystem (if Acceptance by major component or Subsystem is specified pursuant to the SCC for GCC Clause 26.1), has achieved Installation by the date of the Supplier's notice under GCC Clause 24.1, or notify the Supplier in writing of any defects and/or deficiencies, including, but not limited to, defects or deficiencies in the interoperability or integration of the various components and/or Subsystems making up the System. The Supplier shall use all reasonable endeavors to promptly remedy any defect and/or deficiencies that the Project Manager has notified the Supplier of. The Supplier shall then promptly carry out retesting of the System or Subsystem and, when in the Supplier's opinion the System or Subsystem is ready for Commissioning and Operational Acceptance Testing, notify the Procuring agency in writing, in accordance with GCC Clause 24.1. The procedure set out in this GCC Clause 24.2 shall be repeated, as necessary, until an Installation Certificate is issued.
		24.3	If the Project Manager fails to issue the Installation Certificate and fails to inform the Supplier of any defects and/or deficiencies within fourteen (14) days after receipt of the Supplier's notice under GCC Clause 24.1, or if the Procuring agency puts the System or a Subsystem into production operation, then the System (or Subsystem) shall be deemed to have achieved successful Installation as of the date of the Supplier's notice or repeated notice, or when the Procuring agency put the System into production operation, as the case may be.
25.	***Commissioning***	25.1	Commissioning of the System (or Subsystem if specified pursuant to the SCC for GCC Clause 26.1) shall be commenced by the Supplier: (a) immediately after the Installation Certificate is issued by the Project Manager, pursuant to GCC Clause 24.2; or (b) as otherwise specified in the Technical Requirement or the Agreed and Finalized Project Plan; or (c) immediately after Installation is deemed to have occurred, under GCC Clause 24.3.

		25.2	The Procuring agency shall supply the operating and technical personnel and all materials and information reasonably required to enable the Supplier to carry out its obligations with respect to Commissioning. Production use of the System or Subsystem(s) shall not commence prior to the start of formal Operational Acceptance Testing
26.	***Operational Acceptance Tests***	26.1	The Operational Acceptance Tests (and repeats of such tests) shall be the primary responsibility of the Procuring agency (in accordance with GCC Clause 9.9), but shall be conducted with the full cooperation of the Supplier during Commissioning of the System (or major components or Subsystem[s] if specified in the SCC and supported by the Technical Requirements), to ascertain whether the System (or major component or Subsystem[s]) conforms to the Technical Requirements and meets the standard of performance quoted in the Supplier's bid, including, but not restricted to, the functional and technical performance requirements. The Operational Acceptance Tests during Commissioning will be conducted as specified in the SCC, the Technical Requirements and/or the Agreed and Finalized Project Plan. At the Procuring agency's discretion, Operational Acceptance Tests may also be performed on replacement Goods, upgrades and new transaction releases, and Goods that are added or field-modified after Operational Acceptance of the System.
		26.2	If for reasons attributable to the Procuring agency, the Operational Acceptance Test of the System (or Subsystem[s] or major components, pursuant to the SCC for GCC Clause 26.1) cannot be successfully completed within the period specified in the SCC, from the date of Installation or any other period agreed upon in writing by the Procuring agency and the Supplier, the Supplier shall be deemed to have fulfilled its obligations with respect to the technical and functional aspects of the Technical Specifications, SCC and/or the Agreed and Finalized Project Plan.
27.	***Operational Acceptance***	27.1	Subject to GCC Clause 27.4 (Partial Acceptance) below, Operational Acceptance shall occur in respect of the System, when a) the Operational Acceptance Tests, as specified in the Technical Requirements, and/or SCC and/or the Agreed and Finalized Project Plan have been successfully completed; or b) the Operational Acceptance Tests have not been successfully completed or have not been carried out for reasons that are attributable to the Procuring agency within the period from the date of Installation or any other agreed-upon period as specified in GCC Clause 27.2.2 above; or c) the Procuring agency has put the System into production or use for sixty (60) consecutive days. If the System is put into production or use in this manner, the Supplier shall notify the Procuring agency and document such use
		27.2	At any time after any of the events set out in GCC Clause 27.1 have occurred, the Supplier may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate.

		27.3	After consultation with the Procuring agency, and within fourteen (14) days after receipt of the Supplier's notice, the Project Manager shall: (a) issue an Operational Acceptance Certificate; or (b) notify the Supplier in writing of any defect or deficiencies or other reason for the failure of the Operational Acceptance Tests; or (c) issue the Operational Acceptance Certificate, if the situation covered by GCC Clause 27.1 (b) arises.
		27.4	The Supplier shall use all reasonable endeavors to promptly remedy any defect and/or deficiencies and/or other reasons for the failure of the Operational Acceptance Test that the Project Manager has notified the Supplier of. Once such remedies have been made by the Supplier, the Supplier shall notify the Procuring agency, and the Procuring agency, with the full cooperation of the Supplier, shall use all reasonable endeavors to promptly carry out retesting of the System or Subsystem. Upon the successful conclusion of the Operational Acceptance Tests, the Supplier shall notify the Procuring agency of its request for Operational Acceptance Certification, in accordance with GCC Clause 27.3. The Procuring agency shall then issue to the Supplier the Operational Acceptance Certification in accordance with GCC Clause 27.3 (a), or shall notify the Supplier of further defects, deficiencies, or other reasons for the failure of the Operational Acceptance Test. The procedure set out in this GCC Clause 27.4 shall be repeated, as necessary, until an Operational Acceptance Certificate is issued.
		27.5	If the System or Subsystem fails to pass the Operational Acceptance Test(s) in accordance with GCC Clause 26.1, then either: (a) the Procuring agency may consider terminating the Contract, pursuant to GCC Clause 41; or (b) if the failure to achieve Operational Acceptance within the specified time period is a result of the failure of the Procuring agency to fulfill its obligations under the Contract, then the Supplier shall be deemed to have fulfilled its obligations with respect to the relevant technical and functional aspects of the Contract.
		27.6	If within fourteen (14) days after receipt of the Supplier's notice the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Supplier in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the System or Subsystem shall be deemed to have been accepted as of the date of the Supplier's said notice
28.	***Partial Acceptance***	28.1	If so specified in the SCC for GCC Clause 26.1, Installation and Commissioning shall be carried out individually for each identified major component or Subsystem(s) of the System. In this event, the provisions in the Contract relating to Installation and Commissioning, including the Operational Acceptance Test, shall apply to each such major component or Subsystem individually, and Operational Acceptance Certificate(s) shall be issued accordingly for each such major component or Subsystem of the System, subject to the limitations contained in GCC Clause 28.2

		28.2	The issuance of Operational Acceptance Certificates for individual major components or Subsystems pursuant to GCC Clause 28.1 shall not relieve the Supplier of its obligation to obtain an Operational Acceptance Certificate for the System as an integrated whole (if so specified in the SCC for GCC 27.1) once all major components and Subsystems have been supplied, installed, tested, and commissioned
		28.3	In the case of minor components for the System that by their nature do not require Commissioning or an Operational Acceptance Test (e.g., minor fittings, furnishings or site works, etc.), the Project Manager shall issue an Operational Acceptance Certificate within fourteen (14) days after the fittings and/or furnishings have been delivered and/or installed or the site works have been completed. The Supplier shall, however, use all reasonable endeavors to promptly remedy any defects or deficiencies in such minor components detected by the Procuring agency or Supplier.
29.	***Warranty/ Defect Liability Period***	29.1	The Supplier warrants that the system, including all Information Technologies, Materials and other goods supplied and services provided under the Contract are new, unused, of the most recent or current models and that they incorporate all recent improvements in design and materials unless provided otherwise in the Contract. The Supplier further warrants that all Goods supplied and services provided under this Contract shall have no defect, arising from design, materials, or workmanship that prevent the System and/or any of its components from fulfilling the Technical Requirements (except when the design and/or material is required by the Procuring Agency, specifications) or from any act or omission of the Supplier, that may develop under normal use of the supplied Information System in the conditions prevailing in Pakistan. Exceptions and/or limitations, if any, to this warranty with respect to Software (or categories of Software), shall be as specified in the SCC. Commercial warranty provisions of products supplied under the Contract shall apply to the extent that they do not conflict with the provisions of this Contract.
		29.2	This warranty Period shall commence from the date of Operational Acceptance of the System (or of any major component or Subsystem for which separate Operational Acceptance is provided for in the Contract) and shall remain valid for a period specified in the **SCC.**
		29.3	The Procuring Agency shall promptly notify the Supplier in writing or in electronic forms that provide record of the content of communication of any claims arising under this warranty.
		29.4	Upon receipt of such notice, the Supplier shall promptly or within the period specified in the SCC, in consultation and agreement with the Procuring agency regarding appropriate remedying of the defects, and at its sole cost, repair, replace, or otherwise make good (as the Supplier shall, at its discretion, determine) such defect as well as any damage to the System caused by such defect. Any defective Information Technologies or other Goods that have been replaced by the Supplier shall remain the property of the Supplier

		29.5	If the Supplier, having been notified, fails to remedy the defect(s) within the period specified in **SCC**, the Procuring Agency may proceed to take such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Procuring Agency may have against the Supplier under the Contract.
30.	***Intellectual Property Rights Indemnity***	30.1	The Supplier shall indemnify and hold harmless the Procuring agency and its employees and officers from and against any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability), that the Procuring agency or its employees or officers may suffer as a result of any infringement or alleged infringement of any Intellectual Property Rights by reason of: (a) installation of the System by the Supplier or the use of the System, including the Materials, in the country where the site is located; (b) copying of the Software and Materials provided the Supplier in accordance with the Agreement; and (c) sale of the products produced by the System in any country, except to the extent that such losses, liabilities, and costs arise as a result of the Procuring agency's breach of GCC Clause 30.2.
		30.2	Such indemnity shall not cover any use of the System, including the Materials, other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the System, or any products of the System produced thereby in association or combination with any other goods or services not supplied by the Supplier, where the infringement arises because of such association or combination and not because of use of the System in its own right.
		30.3	Such indemnities shall also not apply if any claim of infringement: (a) is asserted by a parent, subsidiary, or affiliate of the Procuring agency's organization; (b) is a direct result of a design mandated by the Procuring Agency's Technical Requirements and the possibility of such infringement was duly noted in the Supplier's Bid; or (c) results from the alteration of the System, including the Materials, by the Procuring agency or any persons other than the Supplier or a person authorized by the Supplier
31.	***Insurance***	31.1	The Information System supplied/provided under the Contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery in the manner specified in the **SCC.**

32.	***Limitation of Liability***	32.1	Provided the following does not exclude or limit any liabilities of either party in ways not permitted by applicable law: (a) the Supplier shall not be liable to the Procuring agency, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Procuring agency; and (b) the aggregate liability of the Supplier to the Procuring agency, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to any obligation of the Supplier to indemnify the Procuring agency with respect to intellectual property rights infringement	
33.	***Related Services***	33.1	The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in **SCC**:	
			a)	Performance or supervision of on-site assembly, Installation Commissioning and/or start-up of the supplied Goods;
			b)	Furnishing of tools required for assembly and/or maintenance of the supplied Goods;
			c)	Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
			d)	Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties, provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and
			e)	Training of the Procuring Agency's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the Goods supplied and Services Provided.
		33.2	Prices charged by the Supplier for related services, if not included in the Contract, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.	
34.	***Change Orders***	34.1	The Procuring Agency may at any time, by a written order given to the Supplier**,** make changes within the general scope of the Contract in any one or more of the following:	
			a)	Drawings, designs, or specifications;
			b)	The method of shipment or packing;
			c)	The place of delivery; and/or
			d)	The Services to be provided by the Supplier.

		34.2	If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract an equitable adjustment shall be made in the Contract Price or delivery schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this clause must be asserted within thirty (30) days from the date of the Supplier's receipt of the Procuring Agency change order.
		34.3	Prices to be charged by the supplier for any related services that might be needed but which were not included in the Contract shall be agreed upon in advance by the Parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.
35.	***Contract Amendments***	35.1	Subject to **GCC Clause 34**, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.
36.	***Assignment***	36.1	Neither the Procuring Agency nor the Supplier shall assign, in whole or in part, obligations under this Contract, except with the prior written consent of the other party.
37.	***Sub-contracts***	37.1	The Supplier shall consult the Procuring Agency in the event of subcontracting under this contract if not already specified in the Bid. Subcontracting shall not alter the Supplier's obligations.
38.	***Delays in the Supplier's Performance***	38.1	Delivery of the Goods and performance of Services making Information system shall be made by the Supplier in accordance with the time schedule prescribed by the Procuring Agency in the Schedule of Requirements.
		38.2	If at any time during performance of the Contract, the Supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the Goods and performance of Services, the Supplier shall promptly notify the Procuring Agency in writing or in electronic forms that provide record of the content of communication of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the Supplier's notice, the Procuring Agency shall evaluate the situation and may at its discretion extend the Supplier's time for performance, with or without liquidated damages, in which case the extension shall be ratified by the parties by amendment of Contract.
		38.3	Except as provided under **GCC Clause 41**, a delay by the Supplier in the performance of its delivery obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to **GCC Clause 39**, unless an extension of time is agreed upon pursuant to **GCC Clause 38.2** without the application of liquidated damages.

39.	***Liquidated Damages***	39.1	Subject to **GCC Clause 41**, if the Supplier fails to deliver any or all of the Goods or to perform the Services within the period(s) specified in the Contract, the Procuring Agency shall, without prejudice to its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in **SCC** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the performance security (or guarantee) specified in **SCC**. Once the said maximum is reached, the Procuring Agency may consider termination of the Contract pursuant to **GCC Clause 40.**	
40.	***Termination for Default***	40.1	The Procuring Agency or the Supplier, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the concerned party may terminate the Contract if the other party causes a fundamental breach of the Contract.	
		40.2	Fundamental breaches of Contract shall include, but shall not be limited to the following:	
			a)	the Supplier fails to deliver any or all of the Goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring Agency or
			b)	the Supplier fails to perform any other obligation(s) under the Contract;
			c)	Supplier's failure to submit performance security (or guarantee) within the time stipulated in the **SCC;**
			d)	the supplier has abandoned or repudiated the contract.
			e)	the Procuring Agency or the Supplier is declared bankrupt or goes into liquidation other than for a reconstruction or amalgamation;
			f)	a payment is not paid by the Procuring Agency to the Supplier after 84 days from the due date for payment;
			g)	the Procuring Agency gives Notice that goods delivered with a defect is a fundamental breach of Contract and the Supplier fails to correct it within a reasonable period of time determined by the Procuring Agency; and
			h)	if the Procuring Agency determines, based on the reasonable evidence, that the Supplier has engaged in corrupt, coercive, collusive, obstructive or fraudulent practices, in competing for or in executing the Contract.
		40.3	For the purpose of this clause:	
			"Corrupt and Fraudulent Practice" means the practices as described in Rule-2 (1) (f) of Public Procurement Rules-2004.	

		40.4	In the event the Procuring Agency terminates the Contract in whole or in part, pursuant to **GCC Clause 26.1,** the Procuring Agency may procure, upon such terms and in such manner as it deems appropriate, Goods or Services similar to those undelivered, and the Supplier shall be liable to the Procuring Agency for any excess costs for such similar Goods or Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.
41.	***Termination for Force Majeure***	41.1	Notwithstanding the provisions of **GCC Clauses 38, 39**, and 40, neither Party shall have any liability or be deemed to be in breach of the Contract for any delay nor is other failure in performance of its obligations under the Contract, if such delay or failure is a result of an event of Force Majeure. For purpose of this clause, ''Force Majeure'' means an event which is beyond the reasonable control of a Party, is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of a Party, and which makes a Party's performance of its obligations hereunder impossible or so impractical as reasonably to be considered impossible in the circumstances, and includes, but is not limited to, war, riots, civil disorder, earthquake, fire, explosion, storm, flood, epidemics, or other adverse weather conditions, strikes, lockouts or other industrial action (except where such strikes, lockouts or other industrial action are within the power of the Party invoking Force Majeure to prevent
		41.2	If a Party (hereinafter referred to as "the Affected Party") is or will be prevented from performing its substantial obligation under the contract by Force Majeure, it shall give a Notice to the other Party giving full particulars of the event and circumstance of Force Majeure in writing or in electronic forms that provide record of the content of communication of such condition and the cause thereof. Unless otherwise directed by the Procuring Agency in writing or in electronic forms that provide record of the content of communication, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.
42.	***Termination for Insolvency***	42.1	The Procuring Agency may at any time terminate the Contract by giving written notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the Procuring Agency.
43.	***Termination for Convenience***	43.1	The Procuring Agency, by written notice sent to the Supplier, may terminate the contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Procuring Agency's convenience, the Contract is terminated, and the date upon which such termination becomes effective.
		43.2	The Systems that are complete and ready for shipment within thirty (30) days after the Supplier's receipt of notice of termination shall be accepted by the Procuring Agency at the Contract terms and price. For the remaining system, the Procuring Agency may elect:

			a)	To have any portion completed and delivered at the Contract terms and prices; and / or
			b)	To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Services and for materials and parts previously procured by the Supplier.
44.	***Transfer of Ownership***	44.1	With the exception of Software and Materials, the ownership of the Information Technologies and other Goods shall be transferred to the Procuring agency at the time of Delivery or otherwise under terms that may be agreed upon and specified in the Contract Agreement.	
		44.2	Ownership and the terms of usage of the Software and Materials supplied under the Contract shall be governed by GCC Clause 14 (Copyright) and any elaboration in the Technical Requirements	
		44.3	Ownership of the Supplier's Equipment used by the Supplier and its Subcontractors in connection with the Contract shall remain with the Supplier or its Subcontractors.	
45.	***Disputes Resolution***	45.1	In the event of any dispute arising out of this contract, either party shall issue a notice of dispute to settle the dispute amicably. The parties hereto shall, within twenty-eight (28) days from the notice date, use their best efforts to settle the dispute amicably through mutual consultations and negotiation. Any unsolved dispute may be referred by either party to an arbitrator that shall be appointed by mutual consent of the both parties.	
		45.2	After the dispute has been referred to the arbitrator, within 30 days, or within such other period as may be proposed by the Parties, the Arbitrator shall give its decision. The rendered decision shall be binding to the Parties.	
46.	***Procedure for Disputes Resolution***	46.1	The arbitration shall be conducted in accordance with the arbitration procedure published by the Institution named and, in the place, shown in the **SCC**.	
		46.2	The rate of the Arbitrator's fee and administrative costs of arbitration shall be borne equally by the Parties. The rates and costs shall be in accordance with the rules of the Appointing Authority. In conducting arbitration to its finality each party shall bear its incurred costs and expenses.	
		46.3	The arbitration shall be conducted in accordance with the arbitration procedure published by the institution named and, in the place, shown in the **SCC**.	
47.	***Replacement of Arbitrator***	47.1	Should the Arbitrator resign or die, or should the Procuring Agency and the Supplier agree that the Arbitrator is not functioning in accordance with the provisions of the contract, a new Arbitrator shall be appointed by mutual consent of the both parties.	
48.	***Notices***	48.1	Any notice given by one party to the other pursuant to this Contract shall be sent to the other party in writing or in electronic forms that provide record of the content of communication and confirmed in writing or in electronic forms that provide record of the content of communication to the other party's address specified in **SCC**.	
		48.2	A notice shall be effective when delivered or on the notice's effective date, whichever is later.	

SECTION VIII: SPECIAL CONDITIONS OF THE CONTRACT (SCC)

Special Conditions of Contract (SCC)

The following Special Conditions of Contract (SCC) shall supplement the GCC. Whenever there is a conflict, the provisions herein shall prevail over those in the GCC. The corresponding clause number of the GCC is indicated in parentheses.

SCC Clause Number	GCC Clause Number	Amendments of, and Supplements to, Clauses in the GCC
Definitions (GCC 1)		
1.	1.1	The Procuring Agency is **SBP Banking Services Corporation.**
2.	1.1(d) (h)	Effective Date of Contract: _____.
3.	1.1(o)	The Supplier is: [*Name and address]*
4.	1.1(p)	The title of the subject procurement or The Project is *Supply, Development, Implementation, Integration and Technical Support of Currency Management System*
Governing Language (GCC 4)		
5.	4.1	The Governing Language shall be **English.**
Applicable Law (GCC 5)		
6.	5.1	The Applicable Law shall be **Laws of Islamic Republic of Pakistan**
	5.2	The Contract shall be effective from the date……
Country of Origin (GCC 6)		
7.	6.1	Country of Origin is ……
Scope of the System (GCC 7)		
8.	7.1	The Scope of the System is *Supply, Development, Implementation, Integration and Technical Support of Currency Management System*
Supplier Responsibilities (GCC 8)		
9.	8.1	The Supplier shall have the following additional responsibilities: ***None***
Procuring Agency's Responsibilities (GCC 9)		
10.	9.1	The Procuring agency shall have the following additional responsibilities: ***None***

Price (GCC 10)

11.	10.1	Prices payable to the Supplier as stated in the Contract are not subject to any adjustment during performance of the contract. However, any subsequent legislation enacted, changes in the rate of any tax, levy of additional tax or duty during the currency of the contract that to impacts the contract price would be duly accounted for by both the parties of the contract i.e. in case of increase or decrease in the rates of the said taxes and duties or levy of any new tax or duty, the contract price would be adjusted accordingly.

Payment (GCC 11)

12. 11.1

Payment for Goods/Supplies and Services/SLA/Training shall be made in **Pakistani Rupees (PKR)**, as follows:

A. One-time Cost of Solution (with Development and Implementation): -

#	Phase	Milestone	Payment (%)
1.	Initiation	Project Charter and Plan	10%
2.		Understanding and Analysis of Business requirements	
3.		Analysis and Finalization of the Business architecture	
4.	Design	Analysis and Finalization of the Detailed Functional requirements	
5.		Analysis and Finalization of Technical Requirements	
6.		Analysis and Finalization of Technical Architecture	
7.		System Design and Model	
8.	Development	System's Modules Development	30%
9.		Supply of System Software Components including licenses based on sizing performed in the Analysis and Finalization of Technical Requirements phase	
10.		Development Reviews	
11.	Testing	Software Quality Assurance and Testing	10%
12.		System Integrations	
13.		Security Assessment and Vulnerability Management	
14.		System Playback and UAT Cycles and Fixation of UAT Incidences	
15.	Implementation	Data Conversion and Migration Plan	30%
16.		Production and DR deployments and Final Testing	
17.		Mock-runs and Parallel runs (as applicable)	
18.		Strategize Go-Live	
19.	Production	Go-Live	20%
20.		Operational Acceptance	

		One-time Cost of Solution shall be paid after completion of above mentioned phase-wise milestones and subject to confirmation from Procuring Agency's Technical Team. **B. Training Charges** **100%** (Hundred percent) of Training Charges will be paid after completion of Trainings and confirmation from Procuring Agency' Technical Team. **C. SLA Payments:** Service Level Agreement (SLA) charges shall be paid in PKR at the end of each six-month period subject to confirmation from Procuring Agency's Technical Team.
13.	11.3	Not Applicable
Performance Guarantee (GCC 12)		
14.	12.1	***10% (Ten Percent)*** Performance Guarantee is required of the total contract amount for the entire contract period. (Performance Guarantee is required at the time of signing of contract).
15.	12.4	After delivery and acceptance of the Information System, **10%** percent of the Performance Guarantee shall be withheld to cover the Supplier's warranty obligations in accordance with **GCC Clause 29.**
Taxes and Duties (GCC 13)		
16.	13.	During the currency of the contract, any subsequent legislation enacted, changes in the rate of any tax, levy of additional tax or duty that impacts the contract price would be duly accounted for by both the parties of the contract i.e. in case of increase or decrease in the rates of the said taxes and duties or levy of any new tax or duty, the contract price would be adjusted accordingly.
Copy Rights (GCC 14)		
17.	14.3	The Procuring agency may assign, license, or otherwise voluntarily transfer its contractual rights to use the Standard Software or elements of the Standard Software, without the Supplier's prior written consent: as defined in Section V: Schedule of Requirements, Technical Specification
18.	14.4	The Procuring agencies and Supplier's rights and obligations with respect to Custom Software or elements of the Custom Software will be utilized and honored as defined in Section V: Schedule of Requirements, Technical Specification
19.	14.5	"No software escrow contract is required for the execution of the Contract"
Software License Validity (GCC 15		
20.	15.1 (a)(iii)	The Standard Software license shall be valid ***"throughout the territory of the Procuring agency's Country;"***

21.	15.1 (a)(iv)	Use of the software shall be subject to the following additional restrictions *N/A*
22.	15.1(b)(ii)	The Software license shall not restrict the Software to be used or copied for use or transferred to a replacement Computer / Server / VM / Appliances / Cloud.
23.	15.1(b)(vii)	The Software license shall permit the Software to be disclosed to and reproduced for use (including a valid sublicense): As defined in Section V: Schedule of Requirements, Technical Specification.
24.	15.1(b)(vii)	In addition to the persons specified in GCC Clause 15.1 (b) (vi), the Software may be disclosed to, and reproduced for use by, *N/A*
Confidential Information (GCC 16)		
25.	16.1	Information relating to evaluation of bids and recommendations concerning to award of the contract shall not be disclosed by the Procuring Agency to the bidders or to any other person who is not officially concerned with the process, until the announcement of the result of evaluation. The Bidder shall not disclose or attempt to make public any information relating to the bidding documents, bidding process and award of the contract to any person or entity without the Procuring Agency's prior written consent. In case of any disclosure related to the bidding process and contractual obligations at any stage by any bidder and/or contractor, the Procuring Agency may reject its bid and/or terminate the contract.
Project Plan (GCC 17)		
26.	17.1	In close cooperation with the Procuring agency and based on the Preliminary Project Plan included in the Supplier's bid, the Supplier shall develop a Project Plan encompassing the activities specified in the Contract. The contents of the Project Plan shall be as specified in the SCC and/or Technical Requirements.
27.	17.2	The Supplier shall formally present to the Procuring agency the Project Plan in accordance with the procedure specified in the SCC or defined in Section V: Schedule of Requirements, Technical Specification.
28.	17.5	The Progress and other reports **specified in the SCC** or defined in Section V: Schedule of Requirements, Technical Specification shall be prepared by the Supplier and submitted to the Procuring agency in the format and frequency specified in the Technical Requirements.
Sub-Contracting (GCC 18)		
29.	18.1	Sub-Contracting is ***Not Applicable***
Transportation (GCC 20)		
30.	20.3	The Supplier is required under the Contact to transport the Goods to a specified place of destination within the Islamic Republic of Pakistan, including

		insurance and storage, shall be arranged by the Supplier, and related costs shall be deemed to have been included in the Contract Price. The Supplier shall be free to use transportation through carriers registered in any eligible country and shall obtain insurance from any eligible source country.
Documents (GCC 21)		
31.	21.1	The Supplier shall provide to the Procuring agency documents as specified in the GCC.
Products Upgrade (GCC 22)		
32.	22.1	The Supplier shall provide the Procuring agency: ***"with all new versions, releases, and updates to all Standard Software during the Contract Period, for free, as specified in the GCC,"***
Inspections and Tests (GCC 23)		
33.	23.1	As per Section V: Schedule of Requirements, Technical Specification
Installations (GCC 24)		
34.	24.1	As per Section V: Schedule of Requirements, Technical Specification
Operational Acceptance Test (GCC 26)		
35.	26.1	As per Section V: Schedule of Requirements, Technical Specification
Defect Liability (GCC 29)		
36.	29.1	For Software, exceptions or limitations to the Supplier's warranty obligations shall be as follows: *None*
37.	29.3	The Supplier warrants that the following items have been released to the market for the following specific minimum time periods: *N/A*
38.	29.4	The Warranty Period (N) shall begin from the date of Operational Acceptance of the System or Subsystem and extend for *N/A*
39.	29.10	During the Warranty Period, the Supplier must commence the work necessary to remedy defects or damage within *N/A*
Intellectual Property Rights Indemnity		
40.	30.1	As per Section V: Schedule of Requirements, Technical Specification.

Insurance (GCC Clause 31)		
41.	31.1	***Not Applicable***
Related Services (GCC Clause 33)		
42.	33.1	Related services to be provided are: As per Section V: Schedule of Requirements, Technical Specification (if applicable)
Change Orders (GCC 34)		
43.	34.1	There are no Special Conditions of Contract applicable to GCC Clause 34.
Assignment (GCC 36)		
44.	36.1	Contract can be assigned: **No**
Liquidated Damages (GCC Clause 39)		
45.	39.1	If the Supplier fails to achieve Operational Acceptance of the complete Solution on the agreed timelines, the Procuring Agency may deduct from the invoice payables for the Cost of Software Solution as liquidated damages, a sum equivalent to 0.2 percent of the Contract Price for each fortnight of delay until actual Operational Acceptance is achieved. After a deduction of 10% of the Contract Price, the Procuring Agency may consider termination of the contract. If the supplier fails to meet the SLA requirements, the Procuring Agency may deduct from the invoice payables from the remaining One-time cost of the Solution as liquidated damages, a sum equivalent to 0.01 percent per day of the Contract Price.
Procedure for Dispute Resolution (GCC Clause 45)		
46.	45.1	**Dispute Resolution** **In case of any dispute arising between the procuring agency and supplier (hereinafter referred to as parties) in connection with or arising out of the contract, the dispute shall be resolved amicably by the parties.** In case if the parties fail to resolve the dispute, such disputes shall be resolved through Arbitration in accordance with Arbitration Act 1940. The place of arbitration shall be Karachi, Pakistan.
Notices (GCC Clause 48)		
47.	48.1	— Procuring Agency's address for notice purposes: Director IT Programs & Project Management Department Ground Floor LRC Building, State Bank of Pakistan

		I.I. Chundrigar Road, Karachi —Supplier's address for notice purposes:

SECTION IX: CONTRACT FORMS

Form of Contract

THIS Contract made the _____ day of _____ 20_____ between *[name and address of Procuring Agency]* of Pakistan (hereinafter called "the Procuring Agency") of the one part and *[name of Supplier]* of *[city and country of Supplier]* (hereinafter called "the Supplier") of the other part:

WHEREAS the Procuring Agency invited Bids for certain goods and related-services, viz., *[brief description of goods and services]* and has accepted a Bid by the Supplier for the supply of those goods and related services in the sum of *[contract price in words and figures]* (hereinafter called "the Contract Price").

NOW THIS CONTRACT WITNESSETH AS FOLLOWS:

1. In this Contract words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.

2. The following documents shall be deemed to form and be read and construed as part of this Contract, In the event of any ambiguity or conflict between the Contract Documents listed below, the order of precedence shall be the order in which the Contract Documents are listed below: -

    a) This form of Contract;
    b) General Conditions of the Contract;
    c) Special Conditions of Contract;
    d) Appendices (Contract);
        i. Appendix – 1 Bid Acceptance Letter
        ii. Appendix – 2 Supplier Acceptance Letter
        iii. Appendix – 3 Supplier's Representative
        iv. Appendix – 4 Technical Specifications
        v. Appendix – 5 Schedule of Requirements;
        vi. Appendix – 6 Form of Bid & Price Schedule
        vii. Appendix – 7 Payment Schedule
        viii. Appendix – 8 Supplier Account Form (S2)
        ix. Appendix – 9 Performance Guarantee (Bank Guarantee)
        x. Appendix – 10 Integrity Pact
        xi. Appendix – 11 Declaration for Beneficial Ownership
        xii. Appendix – 12 Sample Forms of the Contract
            (a) I. Delivery Confirmation Certificate
            (b) II. Installation Certificate Form
            (c) III. Operational Acceptance Certificate Form
        xiii. Appendix – 13 The Supplier's Bid.

3. In consideration of the payments to be made by the Procuring Agency to the Supplier as hereinafter mentioned, the Supplier hereby covenants with the Procuring Agency to provide the goods and related services and to remedy defects therein in conformity in all respects with the provisions of the Contract.

4. The Procuring Agency hereby covenants to pay the Supplier in consideration of the provision of the goods and related services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

5. This Agreement can only be amended or extended in writing and upon mutual consent of both

the parties.

IN WITNESS whereof the parties hereto have caused this Contract to be executed in accordance with their respective laws the day and year first above written.

Sign and seal, (for the Procuring Agency):

_____
Name:
Designation:

Witness 1: _____
Name:
Designation:

Witness 2: _____
Name:
Designation:

Sign and seal, (for the Service Provider/Supplier):

_____
Name:
Designation:

Witness 1: _____
Name:
Designation:

Witness 2: _____
Name:
Designation:

Appendices (Contract)

Appendix – 1 Bid Acceptance Letter

Appendix – 2 Supplier Acceptance Letter

Appendix – 3 Supplier's Representative

Appendix – 4 Technical Specifications

Appendix – 5 Schedule of Requirements;

Appendix – 6 Form of Bid & Price Schedule

Appendix – 7 Payment Schedule

Appendix – 8 Supplier Account Form (S2)

Appendix – 9 Performance Guarantee (Bank Guarantee)

Appendix – 10 Integrity Pact

Appendix – 11 Declaration for Beneficial Ownership

Appendix – 12 Sample Forms of the Contract

- I. Delivery Confirmation Certificate
- II. Installation Certificate Form
- III. Operational Acceptance Certificate Form

Appendix – 13 The Supplier's Bid

Appendix – 1 Bid Acceptance Letter

SBP Banking Services Corporation
General Services Department
Head Office

[Ref. No.] [Date]

IFB No: GSD (PROC-I)/186615/Supply/CMS/2024

Title: Supply, Development, Implementation, Integration and Technical Support of Currency Management System

To: *[name and address of the Supplier]*

This is to notify you that your Bid dated *[date]* for execution of the *[name of the Contract and identification number, as given in the Special Conditions of Contract]* for the Contract Price of the equivalent of *[amount in numbers and words] [name of currency]*, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by us.

We hereby confirm *[insert the name of the Appointing Authority]*, to be the Appointing Authority, to appoint the Arbitrator in case of any arisen disputes.

You are hereby informed that after you have read and return the attached draft Contract the parties to the contract shall sign the vetted contract within fourteen (14) working days.

You are hereby required to furnish the Performance Guarantee/Security in the form and the amount stipulated in the Special Conditions of the Contract within a period of fourteen (14) days after the receipt of Letter of Acceptance.

Authorized Signature:

Name and Title of Signatory:

Name of Agency:

Attachment: Contract

Copy: Appointing Authority and Supplier

Appendix – 2 Supplier Acceptance Letter

[Ref. No.] [Date]

IFB No:	GSD (PROC-I)/186615/Supply/CMS/2024
Title:	Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Supplier:	[Manager]

To:

Director
General Services Department
SBP Banking Services Corporation (HOK)
4th Floor BSC House, I.I Chundrigar Road,
Karachi –Pakistan

Supplier Confirmation Letter for "Supply, Development, Implementation, Integration and Technical Support of Currency Management System"

Dear Sir,

We hereby Confirm and Accept the Notification of Award (***Insert Ref. No. of NoA***) for "***Supply, Development, Implementation, Integration and Technical Support of Currency Management System****"* for a sum of .

We will submit requisite Performance Guarantee within fourteen (14) days and sign & return the Contract within fourteen (14) days from receipt of the Contract Form as per the terms of the Bidding Documents.

Yours Sincerely

Name

Designation

Date:

Appendix – 3 Supplier's Representative

No:	GSD (PROC-I)/186615/Supply/CMS/2024
Title:	Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Supplier:	

Supplier's appointed Representatives are:

Name:	
Designation:	
Contact Details	
Land line:	
Cell:	
Email:	
Address:	

Name:	
Designation:	
Contact Details	
Land line:	
Cell:	
Email:	
Address:	

Appendix – 4 Technical Specifications

No:	GSD (PROC-I)/186615/Supply/CMS/2024
Title:	Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Supplier:	

To be included at the time of signing of contract

Appendix – 5 Schedule of Requirements

No:	GSD (PROC-I)/186615/Supply/CMS/2024
Title:	Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Supplier:	

To be included at the time of signing of contract

Appendix – 6 Form of Bid & Price Schedule

No:	GSD (PROC-I)/186615/Supply/CMS/2024
Title:	Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Supplier:	

To be included at the time of signing of contract

Appendix – 7 Payment Schedule

No:	GSD (PROC-I)/186615/Supply/CMS/2024
Title:	Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Supplier:	

To be included at the time of signing of contract

Appendix – 8 Supplier Account Form (S2)

STATE BANK OF PAKISTAN
Finance Department
Supplier Bank Account Details Form

S-2

1. For OFFICE use: (Please Check)			
Office: **SBP☐ BSC☐**		Department: **General Services Department**	
Create New Supplier:☐		Create New Site:☐	
Update Supplier Info: ☐		Supplier Number:_____	
2. Supplier Information			
Supplier Name	[Manager]		
Supplier NTN	(9 digits)		
CNIC No.	- -	(15 digit) If NTN Not available	
Supplier Address			
Supplier City			
Contact No.		Mobile No.	
E-mail Address		Fax No.	
3. Bank Account Information			
Bank Name			
Branch Name			
Branch Address			
Account No. (IBAN)	PK	Branch Type	**Commercial ☐** **Islamic ☐**
Branch License No.			
Account No. (17 digits)			Account Type:
Title of Account			

(Signature & Stamp of Supplier)

Note:

- Information without complete Bank Account Details & NTN/ CNIC will not be accepted.
- All Payments will be made to suppliers through Bank Account.
- Any change in Bank Account should be conveyed immediately to SBP. Otherwise SBP will not be responsible for credit into wrong account of supplier due to change in bank account details.

SBP Banking Services Corporation

Supplier Management Module

Supplier Creation Form

Annexure-I

1.	Supplier Name	[Manager]	
2.	Supplier Number		
3.	Complete address of the Supplier		
4.	Supplier NTN (9 digits) CNIC No. (15 digit)		(If NTN Not available)
5.	Supplier Type		
6.	With Holding Tax Rate		
7.	Contact Number	Telephone: Fax Number:	
8.	E-mail address		
9.	Bank Details	Bank Name Branch Name Address	
10.	Branch License Number		
11.	Bank Account Number		
12.	Title of Account		
13.	Account Type		
14.	Branch Code No.		

Appendix – 9 Performance Guarantee (Bank Guarantee)

No:	GSD (PROC-I)/186615/Supply/CMS/2024
Title:	Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Supplier:	

Date:	
No.	
Amount:	
Validity:	

To: *[name of Procuring Agency]*

WHEREAS *[name of Supplier]* (hereinafter called "the Supplier") has undertaken, in pursuance of Contract No. *[Reference number of the contract]* dated *[insert date]* to delivery *[description of goods and services] (*hereinafter called "the Contract").

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a reputable bank for the sum specified therein as security for compliance with the Supplier's performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the Supplier a guarantee:

THEREFORE, WE hereby affirm that we are Guarantors and responsible to you, on behalf of the Supplier, up to a total of *[amount of the guarantee in words and figures]*, and we undertake to pay you, upon your first written demand declaring the Supplier to be in default under the Contract and without cavil or argument, any sum or sums within the limits of *[amount of guarantee]* as aforesaid, without your needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the: *[insert date]*

Signature and seal of the Guarantors

_____

[name of bank or financial institution]

_____

[address]

_____

[date]

Appendix – 10 Integrity Pact

SBP Banking Services Corporation

Declaration of Fees, Commissions and Brokerage etc
Payable by the Suppliers of Goods, Services & Works
In Contracts Worth Rs.10.00 Million Or More

No:	GSD (PROC-I)/186615/Supply/CMS/2024
Title:	Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Supplier:	

[Required on non-judicial stamp paper; value of stamp paper should be as per required value as per Stamp Duty Act]

Contract Value: _____ Dated: _____

[Name of Supplier] hereby declares that it has not obtained or induced the procurement of any contract, right, interest, privilege or other obligation or benefit from Government of Pakistan or any administrative subdivision or agency thereof or any other entity owned or controlled by it (GoP) through any corrupt business practice.

Without limiting the generality of the foregoing [Name of Supplier] represents and warrants that it has fully declared the brokerage, commission, fee etc. paid or payable to anyone and not given or agreed to give and shall not give or agree to give to anyone within or outside Pakistan either directly or indirectly through any natural or juridical person, including its affiliate, agent, associate, broker, consultant, director, promoter, shareholder, sponsor or subsidiary, any commission, gratification, bribe, finder's fee or kickback, whether described as consultations fee or otherwise, with the object of obtaining or inducing the procurement of a contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP, except that which has been expressly declared pursuant hereto.

[Name of Supplier] certifies that it has made and will make full disclosure of all agreements and arrangements with all persons in respect of or related to the transaction with GoP and has not taken any action or will not take any action to circumvent the above declaration, representative or warranty.

[Name of Supplier] accepts full responsibility and strict liability for making and false declaration, not making full disclosure, misrepresenting fact or taking any action likely to defeat the purpose of this declaration, representation and warranty. It agrees that any contract, right interest, privilege or other obligation or benefit obtained or procured as aforesaid shall, without prejudice to any other right and remedies available to GoP under any law, contract or other instrument, be voidable at the option of GoP.

Notwithstanding any rights and remedies exercised by GoP in this regard, [Name of Supplier] agrees to indemnify GoP for any loss or damage incurred by it on account of its corrupt business practices and further pay compensation to GoP in an amount equivalent to ten time the sum of any commission, gratification, bribe, finder's fee or kickback given by [Name of Supplier].

as aforesaid for the purpose of obtaining or inducing the procurement of any contract, right, interest, privilege or other obligation or benefit in whatsoever form from GoP.

[Buyer] [Seller/Supplier]

Appendix – 11 Form of Declaration for Ultimate Beneficial Owners Information

IFB No: GSD (PROC-I)/186615/Supply/CMS/2024
Title: Supply, Development, Implementation, Integration and Technical Support of Currency Management System
Supplier:

Declaration of Ultimate Beneficial Owners Information for Public Procurement Contracts

[Required on non-judicial stamp paper; value of stamp paper should be as per required value as per Stamp Duty Act]

1. Name
2. Father's Name/Spouse's Name
3. CNIC/NICOP/Passport no.
4. Nationality
5. Residential address
6. Email address
7. Date on which shareholding, control or interest acquired in the business.
8. In case of indirect shareholding, control or interest being exercised through intermediarycompanies, entities or other legal persons or legal arrangements in the chain of ownership or control, following additional particulars to be provided:

1	2	3	4	5	6	7	8	9	10
Name	Legal form (Company/Limited Liability Partnership/Association ofPersons/Single Member Company/ Partnership Firm/ Trust/Any other individual,body corporate (to be specified))	Date of incorporation/ registration	Name of registering authority	Business Address	Country	Email address	Percentage of shareholding,control or interest of BO in the legal person or legal arrangement	Percentage of shareholding,control or interest of legal person or legal arrangement in the Company	Identity of Natural Person who ultimately owns or controls the legal personor arrangement

9. Information about the Board of Directors (details shall be provided regarding number ofshares in the capital of the company as set opposite respective names).

1	2	3	4	5	6	7	8
Name and surname (InBlock Letters)	CNIC No. (in case of foreigner, Passport No)	Father's/ Husband's Name in full	Current Nationality	Any other Nationality (ies)	Occupation	Residential address infull or the registered/ principal office address for a subscriber other thannatural person	Number of shares taken by each subscriber (in figures and words)
			Total number of shares taken (in figures and words)				

10. Any other information incidental to or relevant to Beneficial Owner(s).

Appendix – 12 Sample Forms of the Contract

I. Delivery Confirmation Certificate

II. Installation Certificate Form

III. Operational Acceptance Certificate Form

II. Delivery Confirmation Certificate

Date:	*[insert: **date**]*
IFB:	*GSD (PROC-I)/186615/Supply/CMS/2024*
Contract:	*Supply, Development, Implementation, Integration and Technical Support of Currency Management System*

To:
*[insert: **name and address of Supplier]***

Dear Sir or Madam:

Pursuant to Contract entered into between and ***State Bank of Pakistan Banking Services Pakistan*** (hereinafter the "Procuring Agency") dated *[insert: **date of Contract]*,* relating to the"***Supply, Development, Implementation, Integration and Technical Support of Currency Management System"***, we hereby notify you that the Goods (or parts or major component thereof) was deemed to have been delivered as per the technical requirement and specification of the bidding documents/contrcaton the date specified below.

1. Description of the Goods (or relevant or parts or major component thereof): "***Supply, Development, Implementation, Integration and Technical Support of Currency Management System"***

2. Date of Delivery: [*insert: **date]***

Notwithstanding the above, you are required to complete the outstanding items listed in Contract as soon as practicable. This letter shall not relieve you of your obligation to install, configure, integrate (as applicable) and achieve Operational Acceptance of the entire System (if applicable) in accordance with the Contract nor of your obligations during the Warranty Period.

For and on behalf of the Procuring Agency

Signed: _____

Date: _____

in the capacity of: Director CySD or nominee thereof

III. Installation Certificate Form

Date:	*[insert: **date**]*
IFB:	*GSD (PROC-I)/186615/Supply/CMS/2024*
Contract:	*Supply, Development, Implementation, Integration and Technical Support of Currency Management System*

To:
*[insert: **name and address of Supplier**]*

Dear Sir or Madam:

Pursuant to Contract entered into between and ***State Bank of Pakistan Banking Services Corporation*** (hereinafter the "Procuring Agency") dated *[insert: **date of Contract**]*, relating to the *"**Supply, Development, Implementation, Integration and Technical Support of Currency Management System**",* we hereby notify you that the System (or a Subsystem or major component thereof) was deemed to have been correctly installed on the date specified below.

1. Description of the System (or relevant Subsystem or major component: *"**Supply, Development, Implementation, Integration and Technical Support of Currency Management System**"*

2. Date of Installation: [*insert: **date**]*

Notwithstanding the above, you are required to complete the outstanding items listed in the attachment to this certificate as soon as practicable. This letter shall not relieve you of your obligation to achieve Operational Acceptance of the System in accordance with the Contract nor of your obligations during the Warranty Period.

For and on behalf of the Procuring Agency

Signed: _____

Date: _____

in the capacity of: Director CySD or nominee thereof

IV. **Operational Acceptance Certificate Form**

Date:	*[insert: **date**]*
IFB:	*GSD (PROC-I)/186615/Supply/CMS/2024*
Contract:	*Supply, Development, Implementation, Integration and Technical Support of Currency Management System*

To:
*[insert: **name and address of Supplier**]*

Dear Sir or Madam:

Pursuant to Contract entered into between and ***State Bank of Pakistan Banking Services Corporation*** (hereinafter the "Procuring Agency") dated *[insert: **date of Contract**]*, relating to the *"**Supply, Development, Implementation, Integration and Technical Support of Currency Management System**",* we hereby notify you the System (or the Subsystem or major component identified below) successfully completed the Operational Acceptance Tests specified in the Contract. In accordance with the terms of the Contract, the Procuring Agency hereby takes over the System (or the Subsystem or major component identified below), together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below.

1. Description of the System (or Subsystem or major component): *"**Supply, Development, Implementation, Integration and Technical Support of Currency Management System**"*

2. Date of Operational Acceptance: *[insert: **date**]*

This letter shall not relieve you of your remaining performance obligations under the Contract nor of your obligations during the Warranty Period.

For and on behalf of the Procuring Agency

Signed: _____

Date: _____

in the capacity of: Director CySD or nominee thereof

Appendix – 13 The Supplier's Bid