

**PAKISTAN SECURITY PRINTING CORPORATION (PVT.) LTD**

**Request for Proposal (RFP)  
for  
Supply, Installation, Implementation, Maintenance and Technical Support of Enterprise  
Resource Planning (ERP) and Track & Trace Solution**

**(Turnkey Project)**

**RFP No. LP/T-4081/26/FA**



**(Two stage bidding procedure as per PPR-2004 Rule 36(c))  
(Quality and Cost Based Selection (QCBS) Method)**

**(In case of any contradiction between tender documents and BOQ / Technical specification, the  
terms & condition mentioned in BOQ / Technical specification will supersede)**

## Standard Bidding Documents for Procurement of Information System

### PART-A – BIDDING PROCEDURE & REQUIREMENTS

#### Section I - Invitation to Bids / Proposals

#### Section II- Instructions to Bidders (ITB)

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. ***This Section contains provisions to be used without modification(s).***

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

This Section includes provisions specific to procurement and to supplement Section-II, Instructions to Bidders. This section may be customized where option is available, in accordance with the requirements of the Procuring Agency.

#### 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 Bid Submission, Price Schedules, and Bid Security etc. These forms are to be completed and submitted by the Bidder as part of e- 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. ***This Section contains provisions to be used without modifications.***

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

This Section consists of Contract Specific general and special conditions. The procuring agency may customize the general conditions of the contract section, in accordance with the requirements.

#### 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/PROPOSALS**



**PAKISTAN SECURITY PRINTING CORPORATION (Pvt.) Ltd**  
(Wholly owned subsidiary of State Bank of Pakistan)  
**Invitation to Bids/Proposals**

*Invitation on No. Tender/RFP # LP/T-4081/25  
Date: March 27, 2026*

1. This Invitation to proposals follows the Procurement Advertisement (PA) No. *RFP No. LP/T-4081/25* for **Supply, Installation, Implementation, Maintenance and Technical Support of Enterprise Resource Planning (ERP) and Track & Trace Solution**.
2. The PAKISTAN SECURITY PRINTING CORPORATION (Pvt.) Ltd. (PSPC) has reserved the funds for the procurement planned during the financial year 2025-26. 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. PSPC now invites proposals from eligible bidders as per eligibility criteria mentioned in para 13.3 (b) of SECTION III: BID DATA SHEET of this document for the **Supply, Installation, Implementation, Maintenance and Technical Support of Enterprise Resource Planning (ERP) and Track & Trace Solution**.
4. The bidding shall be conducted in line with the Two Stage Bidding 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 proposals must be accompanied by a Proposal Security /Earnest Money amounting to **Rs. 5,000,000 (Five Million)** in the form of Pay Order / Bank Draft/ Call Deposit/ unconditional Bank Guarantee drawn in favor of Pakistan Security Printing Corporation (Pvt.) Ltd. Proposals found deficient or without proposal security will be rejected.
6. Complete Tender documents containing the General Conditions of Contract, including BOQ/technical details / specification/terms & conditions etc., are available on EPADS at [www.eprocure.gov.pk](http://www.eprocure.gov.pk)
7. The technical proposals are required to be submitted in First Stage of this tender. These technical proposals shall be opened in first stage of tender. After discussions and finalization of requirements in first stage, revised technical bids along with financial bids are required to be submitted in second stage.
8. Proposals prepared in accordance with the instruction provided in tender document must be submitted by using EPADS on or before **May 12, 2026 11:00 AM**. The technical proposals will be opened on the same day at 11:30 AM using EPADS, bidders' representatives may attend physically at the Tender Room, Allama Iqbal Block, Pakistan Security Printing Corporation (Pvt.) Ltd, Jinnah Avenue, Malir Halt, Karachi-Pakistan.
9. Pre-Bid meeting will be held both in person/physical and via Zoom on **April 13, 2026** in PSPC Board Room located at Head Office, Pakistan Security Printing Corporation (Pvt.) Ltd., Jinnah Avenue, Malir Halt, Karachi, Pakistan. A Zoom session will be arranged for those who wish to attend virtually.
10. To participate in the pre-bid meeting, potential bidders are requested to submit the Non-Disclosure Agreement (NDA) as per format attached with this document and send the following details to [furqan.awan@pspc.gov.pk](mailto:furqan.awan@pspc.gov.pk) at least one day prior to the meeting for entry permission. A Zoom link will be shared upon request sent to the same email address.

- Name of Participant

- CNIC No.
- CNIC Issuance Date
- Vehicle No.
- Company

**Deputy General Manager**  
Purchase Department  
Pakistan Security Printing Corporation (Pvt) Ltd  
Jinnah Avenue Malir Halt, Karachi – 75100  
UAN (021) 111-117-772 (Ext – 2201-18) /  
[muhammad.asad@pspc.gov.pk](mailto:muhammad.asad@pspc.gov.pk) / [furqan.awan@pspc.gov.pk](mailto:furqan.awan@pspc.gov.pk)  
[www.pspc.gov.pk](http://www.pspc.gov.pk)

## **SECTION II: INSTRUCTION TO BIDDERS (ITBs)**

## A. INTRODUCTION

<p><b>1. Scope of Bid</b></p>	<p>1.1</p>	<p>The Procuring Agency (PA), as indicated in the <b>Bid Data Sheet (BDS)</b> invites Bids for the Supply and Installation of the Information Systems as specified in the BDS and <b>Section V - Technical Specifications &amp; Schedule of Requirements</b>. The successful Bidders will be expected to supply and install the information systems within the specified period and timeline(s) as stated in the <b>BDS</b>.</p>
	<p>1.2</p>	<p>Unless otherwise stated throughout this document definitions and interpretations shall be as prescribed in the General Conditions of the Contract (GCC).</p>
<p><b>2. Source of Funds</b></p>	<p>2.1</p>	<p>Source of funds is referred in Clause-2 of Invitation for Bids.</p>
<p><b>3. Eligible Bidders</b></p>	<p>3.1</p>	<p>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. <i>(The limit on the number of members of JV or Consortium or Association may be prescribed in BDS, in accordance with the guidelines issued by the PPRA).</i></p>
	<p>3.2</p>	<p>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.</p>
	<p>3.3</p>	<p>Verifiable copy of the agreement that forms a joint venture, consortium or association shall be required to be submitted as part of the Bid.</p>
	<p>3.4</p>	<p>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.</p>
	<p>3.5</p>	<p>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</p>

		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	<p>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:</p> <ul style="list-style-type: none"> <li>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.</li> <li>b) have controlling shareholders in common; or</li> <li>c) receive or have received any direct or indirect subsidy from any of them; or</li> <li>d) have the same legal representative for purposes of this Bid; or</li> <li>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</li> <li>f) Submit more than one Bid in this Bidding process.</li> </ul>
	3.8	<p>A Bidder may be ineligible if –</p> <ul style="list-style-type: none"> <li>(a) he is declared bankrupt or, in the case of company or firm, insolvent;</li> <li>(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;</li> <li>(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;</li> </ul>

		<p>(d) the Bidder is convicted, by a final judgment, of any offence involving professional conduct;</p> <p>(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.</p> <p>(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.</p>
	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.
<b>4. Eligible Information Systems</b>	4.1	<p>For the purposes of these Bidding Documents, the Information System means all:</p> <p>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</p> <p>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.</p>
	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 <b>BDS</b> , 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.
<b>5. One Bid per Bidder</b>	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.
<b>6. Cost of Bidding</b>	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**

<b>7. Contents of Bidding Documents</b>	7.1	<p>The Contents of the Bidding Documents listed below should be read in conjunction with any addenda issued in accordance with ITB 9.2 include:</p> <p><b>Section I</b> -Invitation to Bids  <b>Section II</b> Instructions to Bidders (ITBs)  <b>Section III</b> Bid Data Sheet (BDS)  <b>Section IV</b> Eligible Countries  <b>Section V</b> Technical Specifications, Schedule of Requirements</p> <p style="text-align: center;">Technical Specifications &amp; Schedule of Requirements.</p> <p><b>Section VI</b> Forms – Bid  <b>Section VII</b> General Conditions of Contract (GCC)  <b>Section VIII</b> Special Conditions of Contract (SCC)  <b>Section IX</b> Contract Forms</p>
	7.2	The number of copies to be completed and returned with the Bid is specified in the <b>BDS</b> .
	7.4	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

		version from downloaded from the website of the Procuring Agency. However, Procuring Agency shall place both the pdf and same editable version to facilitate the bidder for filling the forms.
	7.5	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.
<b>8. Clarification of Bidding Documents, Pre-Bid Meeting and Site Visit</b>	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 <b>BDS</b> .
	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 <b>ITB 23.1</b> . 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 <b>ITB 9</b> .
	8.5	If indicated <b>in the BDS</b> , 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 <b>in the BDS</b> . 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 <b>ITB 9</b> . 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.
<b>9. Amendment of Bidding Documents</b>	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 <b>ITB 7.1</b> 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**

<b>10. Language of Bid</b>	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>BDS</b> . 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 <b>BDS</b> , in which case, for purposes of interpretation of the Bidder, the translation shall govern.
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<p><b>11. Documents Constituting the Bid</b></p>	<p>11.1</p>	<p>The Bid prepared by the Bidder shall constitute the following components: -</p> <ul style="list-style-type: none"> <li>a) Form of Bid and Bid Prices completed in accordance with <b>ITB 14 and 15</b>;</li> <li>b) Details of the Sample(s) where applicable and requested in the <b>BDS</b>.</li> <li>c) Documentary evidence established in accordance with ITB 13 that the Bidder is eligible and/or qualified for the subject bidding process;</li> <li>d) Documentary evidence established in accordance with <b>ITB 13.3(a)</b> 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;</li> <li>e) Documentary evidence established in accordance with <b>ITB 12</b> that the goods and services making Information System to be supplied by the Bidder are eligible, and conform to the Bidding Documents;</li> <li>f) Bid security or Bid Securing Declaration furnished in accordance with <b>ITB 18</b>;</li> <li>g) Duly Notarized Power of Attorney authorizing the signatory of the Bidder to submit the bid; and</li> <li>h) Any other document required in the <b>BDS</b>.</li> </ul>
<p><b>12. Documents Establishing Eligibility of the Information System and Conformity to Bidding Documents</b></p>	<p>12.1</p>	<p>Pursuant to <b>ITB 11</b>, 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.</p>
	<p>12.2</p>	<p>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.</p>
	<p>12.3</p>	<p>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:</p>

		<p>a) a detailed description of the essential technical specifications and performance characteristics of the Goods;</p> <p>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;</p> <p>c) any other procurement specific documentation requirement as stated in the <b>BDS</b>.</p>
	12.4	For purposes of the commentary to be furnished pursuant to <b>ITB 12.3(c)</b> 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.
<b>13. Documents Establishing Eligibility and Qualification of the Bidder</b>	13.1	Pursuant to <b>ITB 11</b> , 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	<p>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:</p> <p>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;</p> <p>b) the Bidder has the financial, technical, and supply/production capability necessary to perform the Contract, meets the qualification criteria specified in <b>BDS</b>.</p> <p>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</p>

		<p>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.</p> <p>d) that the Bidder meets the qualification criteria listed in the Bid Data Sheet.</p>
	13.4	<p>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:</p> <p>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;</p> <p>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;</p> <p>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;</p> <p>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.</p>
<b>14. Form of Bid</b>	14.1	<p>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.</p>

<b>15. Bid Prices</b>	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	<p>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):</p> <p>Provided that:</p> <ul style="list-style-type: none"> <li>a) where there is only one (substantially) responsive bidder, or</li> <li>b) where there is provision for alternate proposals and the respective items are not listed in the other bids,</li> </ul> <p>the procuring agency may fix the price of missing items in accordance with market survey, and the same shall be considered as final price.</p>
	15.4	The Bid price to be quoted in the Form of Bid in accordance with <b>ITB 15.1</b> 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	<p>Prices indicated on the Price Schedule shall be entered separately in the following manner:</p> <ul style="list-style-type: none"> <li>a) For goods manufactured from within Pakistan (or within the country where procurement is being done in case of foreign missions abroad): <ul style="list-style-type: none"> <li>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: <ul style="list-style-type: none"> <li>A. on the components and raw material used in the manufacturing or assembly of goods quoted ex- works or ex-factory;</li> <li>or</li> <li>B. on the previously imported goods of foreign origin quoted ex-warehouse, ex-showroom, or off-the-shelf.</li> </ul> </li> <li>ii) all applicable taxes which will be payable on the goods if the contract is awarded.</li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>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 <b>BDS</b>.</li> <li>iv) the price of other (incidental or allied) services, if any, listed in the <b>BDS</b>.</li> </ul> <p>b) For goods offered from abroad:</p> <ul style="list-style-type: none"> <li>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 <b>BDS</b>. 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</li> <li>ii) the price of the goods quoted FOB port of shipment (or FCA, as the case may be), if specified in the <b>BDS</b>. or</li> <li>iii) the price of goods quoted CFR port of destination (or CPT as the case may be), if specified in the <b>BDS</b>.</li> <li>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 <b>BDS</b>.</li> <li>v) the price of (incidental) services, if any, listed in the <b>BDS</b>.</li> </ul>
15.7	<p>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: -</p> <p>a) <b>For Goods: -</b></p> <ul style="list-style-type: none"> <li>i) the price of the Goods, quoted as per applicable INCOTERMS as specified in the <b>BDS</b></li> <li>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</li> </ul> <p>b) <b>For Related Services</b></p>

		<p>i)</p> <p>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.</p>	<p>The price of the related services, and</p>
	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 <b>ITB 29</b> .	
	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.	
<b>16. Bid Currencies</b>	16.1	<p>Prices shall be quoted in the following currencies:</p> <p>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 <b>BDS</b>.</p> <p>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 US Dollar.</p>	
	16.2	For the purposes of comparison of bids quoted in US Dollar, 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.	
<b>17. Bid Validity Period</b>	17.1	Bids shall remain valid for the period specified in the <b>BDS</b> 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 <b>ITB 18</b> 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 <b>ITB 18</b> 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.
<b>18. Bid Security or Bid Securing Declaration</b>	18.1	Pursuant to <b>ITB 11</b> , unless otherwise specified in the <b>BDS</b> , 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 <b>BDS</b> or Bid Securing Declaration as specified in the <b>BDS</b> in the format provided in <b>Section VI (Standard Forms)</b> .
	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 <b>ITB 18.9</b> .
	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 <b>BDS</b> which shall be in any of the following: <ul style="list-style-type: none"> <li>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;</li> <li>b) a cashier's or certified cheque; or</li> <li>c) another security if indicated in the <b>BDS</b></li> </ul>
	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 <b>Section VI (Standard Forms)</b> 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 <b>ITB 18.9</b> are invoked.
	18.6	Any Bid not accompanied by a Bid Security or Bid Securing Declaration in accordance with <b>ITB 18.1 or 18.3</b> shall be rejected by the Procuring Agency as non-responsive, pursuant to <b>ITB 29</b> .
	18.7	<p>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 <b>ITB 17</b>. 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:</p> <ul style="list-style-type: none"> <li>(a) the expiry of the Bid Security;</li> <li>(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 Bidding documents;</li> <li>(c) the rejection by the Procuring Agency of all Bids;</li> <li>(d) the withdrawal of the Bid prior to the deadline for the submission of Bids, unless the Bidding documents stipulate that no such withdrawal is permitted.</li> </ul>
	18.8	The successful Bidder's Bid Security will be discharged upon the Bidder signing the contract pursuant to <b>ITB 42</b> , or furnishing the performance guarantee, pursuant to <b>ITB 43</b> .
	18.9	<p>The Bid Security may be forfeited or the Bid Securing Declaration executed:</p> <ul style="list-style-type: none"> <li>a) if a Bidder: <ul style="list-style-type: none"> <li>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 <b>ITB 17.2</b>; or</li> <li>ii) does not accept the correction of errors pursuant to <b>ITB 31.2</b>; or</li> </ul> </li> <li>b) in the case of a successful Bidder, if the Bidder fails: <ul style="list-style-type: none"> <li>i) to sign the contract in accordance with <b>ITB 42</b>; or</li> <li>ii) to furnish performance security (or guarantee) in accordance with <b>ITB 43</b>.</li> </ul> </li> </ul>

<b>19. Alternative Bids by Bidders</b>	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 <b>BDS</b> . If so allowed, <b>ITB 19.2</b> 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 <b>BDS</b> as will the method for evaluating different schedule for Information System.
	19.3	If so allowed in the <b>BDS</b> , 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.
<b>20. Withdrawal, Substitution, and Modification of Bids</b>	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 <b>ITB 20.1</b> shall be returned unopened to the Bidders.
<b>21. Format and Signing of Bid</b>	21.1	The Bidder shall prepare an original and the number of copies of the Bid as indicated in the <b>BDS</b> , 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 <b>BDS</b> 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**

<p><b>22. Sealing and Marking of Bids</b></p>	<p>22.1</p>	<p>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.</p> <p><b>Note:</b> <i>The envelopes shall be sealed and marked in accordance with the bidding procedure adopted as referred in Rule-36 of PPR-2004.</i></p>
	<p>22.2</p>	<p>The inner and outer envelopes shall:</p> <ul style="list-style-type: none"> <li>a) be addressed to the Procuring Agency at the address given in the <b>BDS</b>; and</li> <li>b) bear the title of the subject procurement or Project name, as the case may be as indicated in the <b>BDS</b>, the Invitation to Bids (ITB) title and number indicated in the <b>BDS</b>, and a statement: “DO NOT OPEN BEFORE,” to be completed with the time and the date specified in the <b>BDS</b>, pursuant to <b>ITB 23.1</b>.</li> </ul>
	<p>22.3</p>	<p>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:</p> <ul style="list-style-type: none"> <li>a) Bidder shall submit his TECHNICAL PROPOSAL and FINANCIAL PROPOSAL in separate inner envelopes and enclosed in a single outer envelope.</li> <li>b) ORIGINAL and each copy of the Bid shall be separately sealed and put in separate envelopes and marked as such.</li> <li>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.</li> </ul>
	<p>22.4</p>	<p>The inner and outer envelopes shall:</p> <ul style="list-style-type: none"> <li>a) be addressed to the Procuring Agency at the address provided in the Bidding Data;</li> <li>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 <b>ITB 23.1</b>.</li> <li>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</li> </ul>
		<p>If all envelopes are not sealed and marked as required by <b>ITB 22.2</b>, <b>ITB 22.3</b> and <b>ITB 22.4</b> or incorrectly marked, the Procuring</p>

		Agency will assume no responsibility for the misplacement or premature opening of Bid.
<b>23. Deadline for Submission of Bids</b>	23.1	Bids shall be received by the Procuring Agency no later than the date and time specified in the <b>BDS</b> .
	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 <b>ITB 9</b> , 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.
<b>24. Late Bids</b>	24.1	The Procuring Agency shall not consider for evaluation any Bid that arrives after the deadline for submission of Bids, in accordance with <b>ITB 23</b> .
	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.
<b>25. Withdrawal, Substitution, and Modification of Bids</b>	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

<p><b>26. Opening of Bids</b></p>	<p>26.1</p>	<p>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 <b>BDS</b>. The Bidders' representatives present shall sign a register as proof of their attendance.</p>
	<p>26.2</p>	<p>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.</p>
	<p>26.3</p>	<p>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.</p>
	<p>26.4</p>	<p>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.</p>
	<p>26.5</p>	<p>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.</p>
	<p>26.6</p>	<p>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 <b>BDS</b> 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.</p>

	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 <b>ITB 24.</b>
	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.
<b>27. Confidentiality</b>	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 <b>ITB 27.2</b> 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.
<b>28. Clarification of Bids</b>	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 <b>ITB 31</b> .
	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: <ul style="list-style-type: none"> <li>a) evaluation &amp; qualification criteria;</li> <li>b) required scope of work or specifications;</li> <li>c) all securities requirements;</li> <li>d) tax requirements;</li> <li>e) terms and conditions of bidding documents.</li> <li>f) change in the ranking of the bidder</li> </ul>
	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.
<b>29. Preliminary Examination of Bids</b>	29.1	Prior to the detailed evaluation of Bids, the Procuring Agency will determine whether each Bid: <ul style="list-style-type: none"> <li>a) meets the eligibility criteria defined in <b>ITB 3</b> and <b>ITB 4</b>;</li> <li>b) has been prepared as per the format and contents defined by the Procuring Agency in the Bidding Documents;</li> <li>c) has been properly signed;</li> <li>d) is accompanied by the required securities; and</li> <li>e) is substantially responsive to the requirements of the Bidding Documents.</li> </ul>

		The Procuring Agency's determination of a Bid's responsiveness will be based on the contents of the Bid itself.
	29.2	<p>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: -</p> <ul style="list-style-type: none"> <li>a) affects in any substantial way the scope, quality, or performance of the Services;</li> <li>b) limits in any substantial way, inconsistent with the Bidding Documents, the Procuring Agency's rights or the Bidders obligations under the Contract; or</li> <li>c) if rectified, would affect unfairly the competitive position of other Bidders presenting substantially responsive Bids.</li> </ul>
	29.3	The Procuring Agency will confirm that the documents and information specified under <b>ITB 11, 12 and 13</b> 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	<p>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.</p> <p><b>Explanation:</b> <i>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 -</i></p> <ul style="list-style-type: none"> <li>(a) <i>Submit the number of copies of signed bids required by the invitation;</i></li> <li>(b) <i>Furnish required information concerning the number of its employees;</i></li> <li>(c) <i>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</i></li> </ul>

		<i>signature and submits evidence of such authorization and the bid carries such a signature.</i>
	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.
<b>30. Examination of Terms and Conditions; Technical Evaluation</b>	30.1	The Procuring Agency shall examine the Bid to confirm that all terms and conditions specified in the <b>GCC</b> and the <b>SCC</b> 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 <b>ITB 22</b> , to confirm that all requirements specified in <b>Section V - Schedule of Requirements, Technical Specifications of</b> 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 <b>ITB 29</b> , it shall reject the Bid.
<b>31. Correction of Errors</b>	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;

		<p>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</p> <p>c) where there is a discrepancy between the amounts in figures and in words, the amount in words will govern.</p> <p>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.</p>
	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 <b>ITB 18.9</b> .
<b>32. Conversion to Single Currency</b>	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 <b>BDS</b> .
<b>33. Evaluation of Bids</b>	33.1	The Procuring Agency shall evaluate and compare only the Bids determined to be substantially responsive, pursuant to <b>ITB 29</b> .
	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	<p>The Procuring Agency's evaluation of a Bid will take into account:</p> <p>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;</p> <p>b) in the case of goods of foreign origin offered from abroad, customs duties and other similar import taxes which will be</p>

		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.
		<p>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 <b>BDS</b>, and quantified in ITB 32.5:</p> <ul style="list-style-type: none"> <li>a) Cost of inland transportation, insurance, and other costs within the Pakistan incidental to delivery of the goods to their final destination.</li> <li>b) delivery schedule offered in the Bid;</li> <li>c) deviations in payment schedule from that specified in the Special Conditions of Contract;</li> <li>d) the cost of components, mandatory spare parts, and service;</li> <li>e) the availability (in Pakistan) of spare parts and after-sales services for the equipment offered in the Bid;</li> <li>f) the projected operating and maintenance costs during the life of the equipment;</li> <li>g) the performance and productivity of the equipment offered; and/or</li> <li>h) other specific criteria indicated in the <b>TBS</b> and/or in the Technical Specifications.</li> </ul>
	33.5	<p>For factors retained in <b>BDS</b>, pursuant to ITB 33.4 one or more of the following quantification methods will be applied, as detailed in the <b>BDS</b>:</p> <p><i>(a) Inland transportation from EXW/port of entry/border point, Insurance and incidentals.</i></p> <p>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 <b>BDS</b> 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</p>

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*

		<p>The cost to the Procuring Agency of establishing the minimum service facilities and parts inventories, as outlined in the <b>BDS</b> or elsewhere in the Bidding Documents, if quoted separately, shall be added to the Bid price.</p> <p><i>(f) Operating and maintenance costs</i></p> <p>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 <b>BDS</b> or in the Technical Specifications.</p> <p><i>(g) Performance and productivity of the equipment.</i></p> <p>(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 <b>BDS</b> 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 <b>BDS</b> or in the Technical Specifications.</p> <p style="text-align: center;">Or</p> <p>(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 <b>BDS</b> or in the Technical Specifications.</p> <p><i>(h) Specific additional criteria.</i></p> <p>Other specific additional criteria to be considered in the evaluation and the evaluation method shall be detailed in the <b>BDS</b> and/or the Technical Specifications.</p>
	33.6	<p>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 <b>BDS</b>.</p>

<b>34. Domestic Preference</b>	34.1	If the <b>BDS</b> 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.
<b>35. Determination of Most Advantageous Bid</b>	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	<p>The Procuring Agency may adopt the Quality &amp; Cost Based Selection Technique due to the following two reasons:</p> <ul style="list-style-type: none"> <li>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</li> <li>ii. Where the Procuring Agency, in addition to the mandatory requirements and mandatory technical specifications, requires parameters <b>specified in Evaluation Criteria</b> to be evaluated while determining the quality of the goods:</li> </ul> <p>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.</p>
<b>36. Abnormally Low Financial Proposal</b>	36.1	<p>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:</p> <ul style="list-style-type: none"> <li>(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;</li> <li>(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;</li> </ul>

		<p>(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;</p> <p>(d) The Procuring Agency shall not incur any liability solely by rejecting abnormally Bid; and</p> <p>(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.</p> <p>Guidance for Procuring Agency: In order to identify the Abnormally Low Bid (ALB) following approaches can be considered to minimize the scope of subjectivity:</p> <p>(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.</p>
	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.
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**F. AWARD OF CONTRACT**

<b>37. Criteria of Award</b>	37.1	<p>Subject to <b>ITB 36 and 38</b>, 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:</p> <p>a) eligible in accordance with the provisions of ITB 3;</p> <p>b) is determined to be qualified to perform the Contract satisfactorily; and</p> <p>c) Successful negotiations have been concluded, if any.</p>
<b>38. Negotiations</b>	38.1	<p>Negotiations may be undertaken with the Most Advantageous Bid relating to the following areas:</p> <p>(a) a minor alteration to the technical details of the statement of requirements;</p> <p>(b) reduction of quantities for budgetary reasons, where the reduction is in excess of any provided for in the Bidding documents;</p> <p>(c) a minor amendment to the special conditions of Contract;</p> <p>(d) finalizing payment arrangements;</p> <p>(e) delivery arrangements;</p> <p>(f) the methodology for provision of related services; or</p> <p>(g) clarifying details that were not apparent or could not be finalized at the time of Bidding;</p>
	38.2	<p>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.</p>
<b>39. Procuring Agency's Right to reject All Bids</b>	39.1	<p>Notwithstanding <b>ITB 37</b>, 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.</p>
	39.2	<p>Notice of the rejection of all Bids shall be given promptly to all Bidders that have submitted Bids.</p>
	39.3	<p>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.</p>

<p><b>40. Procuring Agency's Right to Vary Quantities at the Time of Award</b></p>	<p>40.1</p>	<p>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.</p>
<p><b>41. Notification of Award</b></p>	<p>41.1</p>	<p>Prior to the award of contract, the Procuring Agency shall issue a Final Evaluation Report giving justification for acceptance or rejection of the bids.</p>
	<p>41.2</p>	<p>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).</p>
	<p>41.3</p>	<p>The notification of award will constitute the formation of the Contract, subject to the Bidder furnishing the Performance guarantee in accordance with <b>ITB 43</b> and signing of the contract in accordance with <b>ITB 42.2</b>.</p>
	<p>41.4</p>	<p>Upon the successful Bidder's furnishing of the performance security guarantee pursuant to <b>ITB 43</b>, 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 <b>ITB 18.7</b>.</p>
<p><b>42. Signing of Contract</b></p>	<p>42.1</p>	<p>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.</p>
	<p>42.2</p>	<p>Immediately after the Redressal of grievance by the GRC, and <b>after fulfillment of all condition's precedent</b> of the Contract Form, the successful Bidder and the Procuring Agency shall sign the contract.</p>
	<p>42.3</p>	<p>Where no formal signing of a contract is required, purchase order issued to the bidder shall be construed to be the contract.</p>
<p><b>43. Performance Security (or Guarantee)</b></p>	<p>43.1</p>	<p>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 <b>BDS and SCC</b>, denominated in the type and proportions of currencies in the Letter of Acceptance and in accordance with the Conditions of Contract.</p>
	<p>43.2</p>	<p>If the Performance Security Guarantee is provided by the successful Bidder and it shall be in the form specified in the <b>BDS</b> which shall be in any of the following:</p>

		<p>(a) certified cheque, cashier's or manager's cheque, or bank draft;</p> <p>(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;</p> <p>(c) bank guarantee confirmed by a reputable local bank or, in the case of a successful foreign Bidder, bonded by a foreign bank; or</p> <p>(d) surety bond callable upon demand issued by any reputable surety or insurance company.</p> <p>Any Performance Security (or guarantee) submitted shall be enforceable in Pakistan.</p>
	43.3	Failure of the successful Bidder to comply with the requirement of <b>ITB 43.1</b> 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.
<b>44. Advance Payment</b>	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 <b>ITB 44.2</b> .
	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 <b>BDS</b> . 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 <b>SCC</b> .
<b>45. Arbitrator</b>	45.1	The Arbitrator shall be appointed by mutual consent of the both parties as per the provisions specified in the <b>SCC</b> .
<b>46. Corrupt &amp; Fraudulent Practices</b>	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.

**F. 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	<p>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:</p> <p>Provided that the complainant may raise the objection on any part of the final evaluation report in case where single stage one envelops bidding procedure is adopted.</p>
	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.

## G. MECHANISM OF BLACKLISTING

<b>49. Mechanism of Blacklisting</b>	49.1	<p>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:</p> <ul style="list-style-type: none"> <li>i. Involved in corrupt and fraudulent practices as defined in Rule-2 of Public Procurement Rules;</li> <li>ii. Fails to perform his contractual obligations; and</li> <li>iii. Fails to abide by the id securing declaration;</li> </ul>
	49.2	<p>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.</p>
	49.3	<p>The procuring agency shall give minimum of seven days to the bidder or contractor for submission of written reply of the show cause notice</p>
	49.4	<p>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.</p>
	49.5	<p>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.</p>
	49.6	<p>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</p>
	49.7	<p>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.</p>

	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.

<b>BDS Clause Number</b>	<b>ITB Number</b>	<b>Amendments of, and Supplements to, Clauses in the Instruction to Bidders</b>
<b>A. Introduction</b>		
<b>1.</b>	<b>1.1</b>	<p>Name of Procuring Agency: <b>Pakistan Security Printing Corporation (Pvt.) Ltd.</b></p> <p>The Description (as specified in IFB) of the System is: <b>Supply, Installation, Implementation, Maintenance and Technical Support of Enterprise Resource Planning (ERP) and Track &amp; Trace Solution at Pakistan Security Printing Corporation (Pvt) Ltd</b></p> <p>The Period of this contract is as follows:</p> <ol style="list-style-type: none"> <li>1. For complete installation, implementation of ERP and Track and Trace solution (i.e. Go-live) is <b>1.5 Years</b> from the award of contract</li> <li>2. For SLA is 5 years from the completion of Hyper-care Support period</li> </ol> <p>Commencement of Services: <b><i>Immediately after Notification of Award of Contract</i></b></p>
<b>3.</b>	<b>2.1 &amp; 2.2</b>	<p>Financial year for the operations of the Procuring Agency: <b>2025-26</b></p> <p>Name of Project: <b>Supply, Installation, Implementation, Maintenance and Technical Support of Enterprise Resource Planning (ERP) and Track &amp; Trace Solution</b></p> <p>Name of financing institution: Not Applicable</p> <p>Name and identification number of the Contract: <b>LP/T-4081/26</b></p>
<b>4.</b>	<b>3.1</b>	<p>Joint Venture/ Consortium is applicable [<b>“YES”</b>]</p> <p>In Case yes, Maximum number of members in the joint venture, consortium or association shall be: <b>[03]</b>.</p> <ol style="list-style-type: none"> <li>a) In case of joint venture/ Consortium, a copy of the agreement entered into by parties shall be submitted with conditions under which it will function, its limit of duration, if any, the persons authorized to represent and obligate it.</li> <li>b) The procuring agency shall not in any way be affected if any litigation or arbitration proceeding takes place between the JV/ Consortium partners.</li> </ol>

		<p>c) The JV partners shall nominate a single project manager with consensus for execution of project and this authorization shall be evidenced by submitting a power of attorney signed by legally authorized signatories of both JV / Consortium partners.</p> <p>d) Any bid submitted by the joint venture/ Consortium shall indicate the part of proposed assignment to be performed by each party 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.</p> <p>e) JV / Consortium shall submit the bid collectively through their authorized person &amp; all the parties shall be severally and jointly responsible for fulfilling their obligations for this assignment and ensuring the completion of all deliverables.</p>
5.	4.6	Demonstration of authorization by manufacturer: <b>Required</b>

## B. Bidding Documents

6.	7.2	The number of documents to be completed and returned is one original through EPADS (Signed and stamp on all pages and dully filled)
7.	8.1	The address for clarification of Bidding Documents is through <b>EPADS.</b>
	8.5	<p>Pre-Bid meeting will be held both in person/physical and via Zoom on <b>April 13, 2026</b> in PSPC Board Room located at Head Office, Pakistan Security Printing Corporation (Pvt.) Ltd., Jinnah Avenue, Malir Halt, Karachi, Pakistan. A Zoom session will be arranged for those who wish to attend virtually.</p> <p>To participate in the pre-bid meeting, potential bidders are requested to submit the Non-Disclosure Agreement (NDA) as per the format attached with this Document and send the following details to <a href="mailto:furqan.awan@pspc.gov.pk">furqan.awan@pspc.gov.pk</a> at least one day prior to the meeting for entry permission. A Zoom link will be shared upon request sent to the same email address.</p> <ul style="list-style-type: none"> <li>• Name of Participant</li> <li>• CNIC No.</li> <li>• CNIC Issuance Date</li> <li>• Vehicle No.</li> <li>• Company</li> </ul>

## C. Preparation of Bids

8.	10.1	The Language of all correspondences and documents related to the Bid is: <b>English</b>
9.	11.1 (h)	In addition to the documents stated in <b>ITB 11</b> , the following documents must be included with the Bid: a) Affidavit for Bidder's Blacklisting Status b) Declaration for Beneficial Ownership c) Non-Disclosure Agreement
10.	12.3 (c)	Other procurement specific documentation requirements: <b>Not Required</b>
11.	12.4	Spare parts required for <i>[specify number of years]</i> of years of operation. (Will be Finalized in Second Stage)
12.	13.3 (b)	The qualification criteria required from Bidders in <b>ITB 13.3(b)</b> is modified as follows:  a) <i>Bidder must have Legal existence as entity of &gt;= 5 years. In case of JV / Consortium (where the JV does not meet the 5 year criteria) each party should have existence of &gt;= 5 years and are registered / legally authorized to operate in Pakistan.</i> b) <i>Bidder must have Registered office and operational presence in Pakistan</i> c) <i>Bidder must have minimum average annual turnover (independent or consolidated) of PKR 500 million in last three years</i> d) <i>Bidder should be Authorized Implementation Partner (for ERP Vendor)</i> e) <i>Bidder should submit Letter of Authorization /Recommendation for Participation from OEM for this project</i> f) <i>Bidder must have deployed at least 3 projects of ERP implementation (Independently or in consortium) in last 7 years</i> g) <i>Bidder must have deployed at least 2 projects of Track and Trace (Independently or in consortium) in last 7 years</i> h) <i>Bidder must have deployed at least 2 projects of ERP implementation and 1 project of track and trace in Manufacturing Industry (Independently or in consortium) that fetch data directly from machines with real time reporting capability in last 7 years</i>  i) <i>Bidder Must not be in litigation with PSPC and PPRA and not have been blacklisted or be in breach</i>

		<p><i>of performance with PSPC and any Organization(s)"</i></p> <p><i>j) Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by any Government (Federal, Provincial), a local and international body or a public sector organization.</i></p> <p><i>k) Bidder must be registered with Income Tax and Sales Tax Departments and must appear on Active Taxpayer List of FBR Pakistan</i></p> <p><i>l) Bidder and their deputed staff must submit an undertaking to comply with PSPC's Code of Conduct, using the prescribed format provided in the tender document.</i></p> <p><i>m) Bidder must submit an undertaking to comply with all applicable HSE laws, regulations and industry standards; and with all HSE requirements of PSPC, using the prescribed format provided in the tender document</i></p> <p><i>n) Bidder must enter into a non-disclosure agreement (NDA) with PSPC at the time of pre bid meeting</i></p> <p><i>o) In case of JV or Consortium the bidder must submit the documents as mentioned in clause 3.1 of Bid Data Sheet (BDS)</i></p> <p><i>p) Proposed ERP should have a deployment of an instance with 500 users in Pakistan</i></p> <p><i>q) OEM of Proposed ERP should have over 100,000 customers around the globe</i></p> <p><i>r) Bidder must comply with technical requirements as mentioned in clause 35.2 section C1 Technical Criteria of BDS</i></p>
13.	<b>15.6 (a) (iii), (iv) (optional)</b>	For goods manufactured or delivered from within Pakistan the price quoted shall be on a Delivered Duty Paid (DDP) basis, inclusive of all taxes, stamps, duties, levies, fees, transportation, insurance, incidental services imposed till the delivery location specified in the Schedule of Requirements.
14.	<b>15.6 (a) (i) &amp; 15.6 (b) (i)</b>	For goods offered from abroad the price quoted shall be: <i>[Not Applicable]</i>
15.	<b>15.8</b>	The price shall be fixed.

16.	16.1 (a)	<p>a) For goods / related services and Information System originating within Pakistan, the prices shall be quoted in Pakistani Rupees (PKR).</p> <p>b) For goods / related services and Information System originating OEM License, its renewal and support provided from outside Pakistan, the Bid prices shall be quoted in any freely convertible currency of another country.</p>
17.	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 bids specified in the bidding documents, as notified by the State Bank of Pakistan on that day
18.	17.1	The Bid Validity period shall be <b>150</b> days from the opening of Financial Bid
19.	18.1	<p>The amount of Bid Security shall be : <b>Rs. 5,000,000/-</b></p> <p>The currency of the Bid Security shall be <b>PAKISTAN RUPEE</b></p>
20.	18.3	<p>The Bid Security shall be in favor of Procuring Agency in the form of: <i>either Payment Order/Bank Draft or an unconditional Bank Guarantee enforceable in Pakistan</i> or insurance guarantee (PACRA Rating “AAA, AA++”). The document of bid security will be subject to verification.</p> <p><i>The Bid Security of un-successful bidders will be returned after 5 days of posting of Final Evaluation Report on EPADS and PPRA</i></p>
21.	18.3 (c)	Another Security: <b>Not Applicable.</b>
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 <b>None.</b>
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)	To be submitted using EPADS on or before deadline.
26.	22.2 (b)	Title of the subject Procurement or Project name: <b>Supply, Installation, Implementation, Maintenance and Technical</b>

		<b>Support of Enterprise Resource Planning (ERP) and Track &amp; Trace Solution</b> ITB title and No: <b>RFP No. LP/T4081/26</b>
<b>27.</b>	<b>23.1</b>	The deadline for Bid submission is  <b>May 12, 2026 11:00 AM</b>

#### **E. Opening and Evaluation of Bids**

<b>28.</b>	<b>26.1</b>	Bids will be opened using EPADS on:  <b>May 12, 2026 11:30 AM</b>  Bids will be opened using EPADS in presence of the bidder(s), who desire to attend. Conditional / incomplete bid document will not be considered. 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.
<b>29.</b>	<b>32.2</b>	The currency that shall be used for Bid evaluation and comparison purposes is: <b>Pakistani Rupees.</b>
<b>30.</b>	<b>33.4 (h)</b>	Other specific criteria are <b>Nil</b>
<b>31.</b>	<b>33.5 (a)</b>	Inland transportation from EXW/port of entry/border point to <b><i>Pakistan Security Printing Corporation (Pvt) Ltd, Jinnah Avenue Malir Halt Karachi</i></b> , and insurance and incidentals.
<b>32.</b>	<b>33.5 (b)</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/BOQ.  <b>No credit will be given to earlier deliveries, and Bids offering delivery beyond this range will be treated as non-responsive.</b>
<b>33.</b>	<b>33.5 (c) (ii)</b>	Deviation in payment schedule is <b>Not Applicable.</b>
<b>34.</b>	<b>33.5 (d)</b>	Cost of spare parts <b>Not Applicable.</b>
<b>35.</b>	<b>33.5(e)</b>	Spare parts and after sales service facilities in Pakistan. <b>Not Applicable.</b>

36.	33.5 (f)	Operating and maintenance costs.  As specified in the BOQ/ Technical Specifications / SLA in the Bidding Documents
37.	33.5 (g)	Performance and productivity of Information System.  Items offered shall have a minimum productivity specified under the relevant provision to be considered responsive as specified in the Technical Specifications.
38.	33.5 (h)	Specific additional criteria to be used in the evaluation and their evaluation method or reference to the Technical Specifications. <b>Not Applicable.</b>
39.	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 :-  Bidder(s) shall submit bid for Complete Requirement, evaluation of bids and award of contract(s) will be made for the Complete Requirement as specified in bid evaluation criteria.
40.	34.1	a) Domestic preference to <b>Not Applicable.</b>
41.	35.2	<b>Evaluation Techniques</b> <b>A. PROCUREMENT METHOD:</b> As per Public Procurement Rules PPR-2004 Rule 36(c), bidding procedure shall be "Two Stage Bidding Procedure"  First stage (i) the bidders shall first submit, according to the required specifications, a technical proposal without price; (ii) the technical proposal shall be evaluated in accordance with the specified evaluation criteria and may be discussed with the bidders regarding any deficiencies and unsatisfactory technical features; (iii) after such discussions, all the bidders shall be permitted to revise their respective technical proposals to meet the requirements of the procuring agency; (iv) the procuring agency may revise, delete, modify or add any aspect of the technical requirements or evaluation criteria, or it may add new requirements or criteria not inconsistent with PPRA rules: Provided that such revisions, deletions, modifications or additions are communicated to all the bidders equally at the time of invitation to submit final bids, and that sufficient time is allowed to the bidders to prepare their revised bids: Provided further that such allowance of time shall not be less than fifteen days in the case of national competitive bidding and thirty days in the case of international competitive bidding;

(v) those bidders not willing to conform their respective bids to the procuring agency's technical requirements may be allowed to withdraw from the bidding without forfeiture of their bid security;  
Second stage

(vi) the bidders, whose technical proposals or bids have not been rejected and who are willing to conform their bids to the revised technical requirements of the procuring agency, shall be invited to submit a revised technical proposal along with the financial proposal;

(vii) the revised technical proposal and the financial proposal shall be opened \*\*on respective specified, date and venue announced and communicated to the bidders in advance; and (viii) the revised technical proposal and the financial proposal shall be evaluated in the manner prescribed above. The bid found to be the \*most advantageous bid shall be accepted: Provided that in setting the date for the submission of the revised technical proposal and financial proposal a procuring agency shall allow sufficient time to the bidders to incorporate the agreed upon changes in the technical proposal and prepare their financial proposals accordingly.

#### **B. SELECTION TECHNIQUE**

**NOTE: This criterion will be applied at the second stage, after incorporating any changes finalized through discussions with the eligible bidders. To qualify for the second stage, the bidder must fulfill the eligibility criteria as specified in Section - VI Form T3 - Bidder's Eligibility / Qualification Criteria of this document:**

#### **Quality and Cost Based Selection (QCBS)**

In such combination, there shall be some specific weightage of both the technical features (such as prescribed in ITB 35.2) and financial aspects of the proposal. The financial marks shall be awarded on the basis of inverse proportion calculations. The highest ranked bid shall be declared, on the basis of combined evaluation.

#### **C. EVALUATION CRITERIA of QCBS**

Technical Evaluation (weightage)      70%

Financial Evaluation (weightage)      30%

Overall Evaluation Criteria = (Marks in Tech Eval. Out of 100) x 70%  
+ (Marks in Financial Evaluation out of 100) x 30%

Example: "If any bidder acquires 85 marks in technical evaluation and 60 marks in financial evaluation, its total marks will be (85 x 60/100) + (70 x 30/100) equals to 75

The bid scoring highest marks in overall Bid Evaluation will be considered successful.

**C1: Technical Requirements**

Sr. No.	Requirement
1	Proposed ERP / Support Solutions should be hosted 'On-Prem'. Cloud solutions will automatically disqualify / technology in all aspects should not have an 'End of Support' announced in next five years
2	Bidder must nominate a Project Director supported by at least One Experienced Functional Representative from OEM having 10 years' experience for participation in periodic ERP steering meetings.
3	Bidder must depute Project Team having Profiles that comply with requirements mentioned in Annexure - D
4	Bidder must provide post Go-Live Hyper Care Support for a minimum duration of 4 months as per requirements mentioned at Annexure C.
5	Any customization / vendor developed solution must comply with Annexure A - Requirement for ERP Customization / Vendor-Developed Solutions
6	Synchronization of data capturing with machine speeds of printing. (min. 8000 SPH)
7	Technology of both ERP and Track & Trace should support interaction with data capturing devices like OCR reader, barcode reader, etc.
8	Seamless integration synchronization with built-in scanners / IoT / cameras and other machine equipment of PSPC.
9	Post Implementation SLA must comply with Annexure B - ERP Managed Services & Service Level Agreement
10	The proposed ERP/ Custom Application should integrate with On-Prem Active Directory

**C2: Financial Bid Evaluation Criteria**

Bidders must submit section wise financial bid in a separate envelope clearly mentioning "financial bid" on the top. The Financial bid will be evaluated as per following criteria. The lowest quoted bid say Bid-B will be awarded full 100 Marks. The other bid say Bid-A will be awarded marks in financial bid evaluation as:

Marks awarded to Bid-A = (Price quoted in lowest Bid-B/Price quoted in Bid-A) x 100  
 Example: -

		Bids	Price Quoted	Marks awarded in Financial Evaluation
		A	80 Million	(60/80) x100=75
		B	60 Million	100
		C	100 Million	(60/100) x100=60
<b>F. Award of Contract</b>				
42.	40.1	Percentage for quantity increase or decrease is <b>15%</b> .		
43.	43.1	The Performance Guarantee shall be <b>02</b> percent of the total cost of Project for the entire period of the contract		
44.	43.2	<p><b>i)</b> The Performance Guarantee shall be in the form of an unconditional Bank Guarantee enforceable in Pakistan, or insurance guarantee (<i>PACRA Rating "AAA, AA++"</i>) or as per Performance Guarantee form specified in the Bidding Documents. The guarantee must be valid for a period exceeding 28 days after completion of contract.</p> <p><b>ii)</b> the bidder will submit the performance guarantee within 10 days of the issuance of Letter of Intent.</p>		
45.	44.1 & 2	10% advance payment of the total contract value may be released, if required, subject to the provision of unconditional Bank Guarantee drawn in favor of Pakistan Security Printing Corporation.		
46.	45.1	<p>In case of any dispute and difference which may arise in connection with the execution of the contract, the matter shall be referred to Managing Director of Corporation, who shall take decision in the matter.</p> <p>In case the dispute remains unresolved, the matter will be resolved through arbitration as per the Arbitration Act, 1940. The place of Arbitration shall be Karachi, Pakistan.</p>		

### G. Review of Procurement Decisions

47.	48.1	<p>The address of the Procuring Agency</p> <p>Chairman (Grievance Redressal Committee) Pakistan Security Printing Corporation (Pvt.) Ltd Jinnah Avenue, Malir Halt, Karachi - Pakistan</p>
	48.6	<p>The Address of PPRA to submit a <b>copy</b> of grievance:</p> <p>Grievance Redressal Appellate Committee, Public Procurement Regulatory Authority 1<sup>st</sup> Floor, G-5/2, Islamabad, Pakistan Tel: +92-51-9202254</p>

#### **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**

## SECTION VII: TECHNICAL REQUIREMENT

These are indicative set of Technical Requirements that may be updated in the light of First Stage Evaluations. The Bidders will ensure that the constituents of these requirements are shared within their respective JV/Consortium and to the OEMs strictly limited to those in part or full and subsequently ensure the limited distribution of such information to only the relevant stakeholders.

### ***BOQ***

#### **1 Background**

Pakistan Security Printing Corporation is pursuing strategic initiative to implement a modern Enterprise Resource Planning (ERP) system as a core enabler of the organization's digital transformation agenda. The new ERP solution will replace majority of the in-house developed legacy applications with an integrated, data-driven platform that supports proactive decision-making, operational efficiency and long-term scalability.

PSPC aims to target this by standardizing business processes, centralizing data and automating key operational workflows. The ERP will enable enhanced visibility and control across core and other mission-critical functions. This transformation will enable the organization to respond rapidly to market changes, compliance requirements and evolving customer expectations.

The ERP system will support:

- Real-time reporting, predictive analytics and configurable workflows that will empower departments to make proactive, timely and informed decisions.
- Reducing manual intervention and improving process accuracy, shorten cycle times, increase productivity and reduce operational risks.
- Scalability and future-readiness, modular expansion and integration with emerging technologies such as AI-driven analytics, robotic process automation (RPA).
- Implementation that will follow globally recognized methodologies and best practices to ensure smooth transition, minimal disruption.
- Comprehensive change management, user training, data migration planning and post-go-live support as part of the project's execution strategy.

PSPC intends to engage the vendor to perform the following:

- Review this document in detail
- Collaborate with the ERP organization to offer PSPC an effective & scalable ERP solution, clearly indicating but not limited to the following:
  - Modules that are required to be implemented to cover the requirements
  - License cost based on the optimized and applicable criteria
  - Support / Other annual costs

Complete End to End Implementation of entire system

- Required data sharing using APIs with other supporting apps i.e. inhouse apps developed in APEX, KM, Track & Trace (Refer to Section 3). Design, deployment and support for automation of data capturing that will enable barcode / QR code tracking of each area of operation and its interfacing with ERP.
- Procurement & deployment of Cameras, OCR, barcode readers and other track & trace equipment that may be needed to facilitate track & trace as indicated in the previous point
- Documentation of processes e.g., 'AS-IS' / 'TO-BE', UAT Scripts or applicable as per the implementation methodology suggesting BPR where applicable
- Data Cleansing & Migration from existing ERP application to new ERP
- Training of PSPC employees and IT team in functional, technical and operational areas along with technical and user manuals
- Minimum 4 months Hypercare Support post Go-Live
- 5 years complete ERP functional and technical support & maintenance commencing immediately after Hyper care support period.

## **2 Organization Overview**

Pakistan Security Printing Corporation (PSPC) is the only dedicated security printing facility in Pakistan, serving as a fundamental component of the country's financial and security printing infrastructure. It is a subsidiary of the State Bank of Pakistan.

**Business Segments:** Following are PSPC's Business Segments:

1- Bank Notes - covers the printing of currency notes & prize bonds

2- Other Security Printing (OSP) - covers the printing of other security documents like passports, governmental security papers, etc. In addition, non-governmental printing like cheque books, certificates, degrees and others are also covered under the OSP printing.

3- Paper Mill in near future as a third Business Segment.

ERP should have the functionality to add unlimited Business Segments without additional licenses in the future whenever required

**Geographical Segments:** PSPC has also two distinct geographical units. One at Karachi and second at Faisalabad. The system should cater to the geographical segmentation end-to-end for capturing and reporting of both operational and financial data. ERP will have the functionality to add unlimited geographical locations without additional license cost whenever required.

### **2.1 Operational Environment:**

**High Security Environment:** PSPC have robust process for secured and controlled access. Strict accountability is enforced at each stage of operation, facilitated through strong rooms, compliance to regulatory directives (SBP, PPRA, etc.) to ensure confidentiality and security against leakages, counterfeiting & high wastages

**Diverse Printing:** Diverse printing sequences and processes for Bank Notes and OSP is applied through segregated teams & operations

### 3 **Current Digital Environment:**

- **ERP:** PSPC is currently running an in-house built application for executing and recording of all core transactions including Sales, Operations, Inventory, Purchasing, Finance & Accounts, Human Resource, Quality etc. This ERP though serving the transactional purpose but lacks complete integration & functionality, real time visibility, traceability, advanced functionality & adoption of best practices. Implementation of ERP is expected to replace most of its modules. However, some data exchange may be required for supporting modules like payroll, access management, etc. using APIs
- **KM Application:** IBM KM Application is currently in use for workflow and content management purposes. The application is centrally hosted and managed by SBP, while special configuration has allowed PSPC related transactions. This application is expected to remain active for specific purposes. ERP will need to be interfaced with this application
- **EPAD Portal:** EPAD portal is hosted and managed by PPRA and is mandatory for all government and public entities to use it for procurements. Purchase Requisition is generated through ERP, , while other documents including RFQ / Tender documents, BOQ etc. are currently made manually. PR along with the mentioned documents are then made available at EPAD portal. Bidding process is performed at EPAD portal and purchase order is created accordingly. Same Purchase Order is also created in ERP with reference of EPAD Purchase order for further processing. Since EPAD currently do not offer any APIs at the moment the data where required need to be shared using file exchange.
- **Track & Trace (Finishing Line):** PSPC is currently in the process of deploying track and trace application for the finishing process for Bank Notes, i.e., from Bundle formation to Pallet's packaging and dispatching to the various SBP warehouses across the country. The application will manage barcode tracking of bundles, boxes & pallets using special printers and OCR cameras. Critical information like bundle record, quality parameters, inventory, etc. is required to be interfaced seamlessly with ERP
- **Track & Trace (End to End):** Since, Track and Trace (Finishing Line) will track the process from bundle onwards, PSPC requires tracking of complete process from Paper to Pallets. In this context, PSPC is intending to introduce another application to track the remaining processes. This project is expected to implement track and trace module from initiation of PSPC process till its conclusion with implementation of ERP. This application is required to be interfaced seamlessly with ERP. (Refer to section **Technical Specifications of Track & Trace**)

## **4 Enterprise Resource Planning Project**

### **4.1 Project Objective:**

To achieve operational agility, that will enable the organization to be competitive & ready to sustain technological changes.

This will be facilitated through the implementation of an integrated ERP application and interfacing with allied systems that is expected to enhance visibility, assist proactive decision making and support scalability and diversification

### **4.2 Scope:**

Since overall scope of ERP is enterprise wide and is expected to cover various modules, PSPC will take a phased approach and intend to initiate the project by covering the following core modules.

#### Phase 1

- Source / Procure to Pay
- Warehouse & Inventory Management
- Order to Cash
- Production Planning & Execution
- Quality Management
- Plant Maintenance
- Finance & Accounts
- Human Resource (Basic)
- Analytics & Reporting
- MES (Manufacturing execution system)

Though, initial phase will target the core modules, a holistic view is imperative to ensure compatibility of the modules to be implemented in later phases if and when required. Hence, Suppliers will be required to submit Fact / Data Sheet of each of following modules for their respective offered ERPs / Supplier developed solutions (preferred ERP based). In case of Supplier Developed solution, the Supplier will have to submit the list of minimum 3 instances (along with contacts) where both the offered ERP and Supplier Developed Solutions are successfully implemented and interfaced for necessary exchange of data as per requirements defined in this document. Note that these modules may or may not be required at later stage and hence it is only taken as a reference without any commitment to the bidders

#### Future Prospect Modules (if required)

- Environment Health & Safety
- Governance, Risk & Compliance
- Human Resource (Advance)
  - Recruitment & Selection
  - Training & Development
  - Company Policies
  - Performance Management
  - Compensation & Benefits
  - Employee Relations
  - Ensuring Legal Compliance
- CRM (if applicable)

## 5 **Detailed Functional Requirement:**

Proposed Application is expected to cover at the minimum, the following functionalities:

### 5.1 **Source / Procure-to-Pay:**

The ERP must manage the entire procurement lifecycle from initial need identification to final payment with robust controls, seamless integration and adaptability to both local and foreign procurement regulations. The system must support Tender Process, Request for Quotation (RFQ), Inquiry for both local and foreign purchasing and Petty Cash Purchases. The system must be aligned with existing PPRA rules and should also be flexible/capable to incorporate any change in rules.

#### **Purchase Requisition (PR) Management:**

- Independent as well as financial budget validation and control
- PR can be raised for capital as well as revenue expenditures. It must be linked with the budget section of Finance & Accounts module to check the availability of budget at the time of initiating Requisition.
- Provision for raising independent procurement processes for material / goods or service / Civil works as well as combination of both
- Support the attachment of technical specifications, drawings and other supporting documents directly to the PR / PO
- Implement a dynamic, rule-based approval workflow engine that automatically routes PRs based on pre-defined criteria including:
  - Material/Service Type
  - Total PR Value
  - Requesting Department
- The workflow must support:
  - HR as well as Independent Hierarchy
  - Sequential, Parallel, Any
  - Multi-tiered approvals (e.g., Section Head → Department Head → Functional Head) as per PSPC's delegation of authority
- Seamlessly integrate with the existing KM Application for approval tasks and notifications. Alternatively, the ERP must fully replicate the KM Application's approval logic and hierarchy within its native workflow module, ensuring no loss of functionality
- Provide real-time visibility into the PR approval status for initiators and procurement teams
- Automatically notify the PR initiator of approval, rejection or a rework request through system and email.
- Upon approval, automatically route the PR to the respective section in the Procurement Department (Local or Foreign) for action, via system notification and email
- For rejected PRs, enable a clear rework and resubmission process with a complete audit trail

#### 5.1.1 **Tender & RFP Management:**

- Tender Lifecycle Management in line with PPRA Regulations Preferably through ERP standard functionality)

- Provide a centralized platform to manage the entire tender process from Initiation to Award (Preferred not mandatory)
- Allow creation of Request for Proposal (RFP) documents within the system, linking them to the approved PR
- Manage RFP / Tender Approvals with specific financial thresholds through integrated workflows
- Provision to publish RFPs/Bid Requests/ Tender directly from the ERP to the EPAD portal and other designated channels (e.g., PPRA website) via APIs (Required in future)
- Automatically notify registered vendors about new bid opportunities through the system and email
- Provision to provide a secure portal for vendors to download RFP documents and upload their Technical and Financial bids electronically
- Provision to enforce bid submission deadlines and ensure a secure, tamper-proof bid-opening mechanism
- Automatically notify registered vendors about new bid opportunities through the system and email
- Provide a secure portal for vendors to download RFP/Tender and other documents and upload their Technical and Financial bids electronically
- Manage the Financial Bid Opening process and support a comparative statement (Tender Abstract) generation
- Enforce bid submission deadlines and ensure a secure, tamper-proof bid-opening mechanism
- Facilitate the electronic routing of bids to the PR Initiator/User Department for technical evaluation & predefined committees for financial and final bid evaluation and approvals
- Provide tools for the evaluation committee to score vendors, record observations and make recommendations within the system
- Manage the Financial Bid Opening process and support a comparative statement (Tender Abstract) generation
- Once the bid is selected, update the system with the award decision and auto / manual generation of Purchase Order
- Manage the Vendor Feedback process for unsuccessful bidders within the system

#### 5.1.2 Vendor Management & Integration:

- Maintain a centralized Vendor Master with fields for compliance status, performance ratings and product categories
- Provision to integrate with the EPAD Portal via secure APIs for bidirectional synchronization of vendor data. This includes automatically registering new vendors from EPAD and updating vendor credentials and statuses (Required in future)

#### 5.1.3 Purchase Order (PO) Management:

- Support the creation of Local Purchase Orders and Foreign Purchase Orders.
- For Foreign POs, the system must capture specific import conditions, Incoterms, shipping details and LC-related information

- Automatically convert approved PRs into POs, pulling all relevant information to minimize manual data entry
- Implement a stringent, multi-level PO approval workflow based on delegated financial authority.
- Multiple Unit of Measures (UOM) should be supported i.e. purchasing can be done in UOM other than primary unit of measures
- Integrate with the KM Application to route POs for authorization, or replicate this logic within the ERP.
- Ensure authorized approvers can validate and approve POs directly in the system, with a clear audit trail for each approval
- Automatically dispatch approved POs to vendors via email
- Track vendor acknowledgment of the PO

#### 5.1.4 **Goods Receipt & Inspection**

- Record all incoming materials against a specific PO
- The system must support the creation of a Goods Received Note (GRN) upon satisfactory physical inspection and verification of quantity/quality
- For technical items, the system must automatically place received goods into a "Quality Hold" or "Inspection" stock type upon GRN creation.
- It should generate a Quality Inspection Request (QIR) process and notify the relevant quality inspectors.
- Only upon approval from the quality department should the stock status be updated for use
- Upon GRN posting (and quality clearance, if applicable), the system must update inventory records in real-time
- Clearly differentiate between stock types: Unrestricted, Quality Inspection and Blocked/Rejected
- Landed Cost Management (LCM) required to record import incidentals like duties, port charges, clearing agent charges etc. that can be automatically loaded on the items with separate order and line charges. Auto allocation based on predefined formula is preferred
- Track and manage the status of foreign shipments, including coordination with clearing agents, customs documentation and carrier information.
- All incoming critical items must be scanned against PO lines to expedite and authenticate the incoming process

#### 5.1.5 **Invoice Verification & Payment**

- Enforce a mandatory Three-Way Match (PO, GRN, Invoice) before any payment can be processed. The system should highlight discrepancies for manual resolution
- Provision for vendors to submit invoices electronically via portal or email, with the ability to scan and attach paper invoices
- Manage different payment types:
  - Vendor Payments: Against approved invoices and GRNs.

- Statutory Payments: Automatically calculate and create payment proposals for mandatory fees to PPRA, advertisement charges to PID or any other statutory Payments etc
- Petty Cash & Cash Purchases: Support the reimbursement process for petty cash expenses, enforcing authorization limits and requiring receipt uploads
- Fully support Letter of Credit (LC) processes, including opening, amendment and settlement
- Integrate with banking systems to execute foreign currency remittances
- Manage coordination with banks for LC-related activities
- Automatically post all procurement and payment transactions to the General Ledger and update Commitment Control records
- Support a Pre-Audit function to confirm budget availability and compliance before contract award or LC issuance.
- Provide a complete, unalterable audit trail for every transaction from PR to payment, ensuring full transparency for internal and external audits

## 5.2 Warehouse & Inventory Management

- This module is the core of physical inventory control and must have the functionality to support PSPC's physical warehouse management
- Ability to define and manage warehouses / stores with following features:
  - Define a multi-level warehouse with Storage Types and Bins.
  - Access and transactional controls based on warehouse / store type, transaction type (restricting which transactions are allowed e.g. issue, miscellaneous, receiving, etc.), user department, user level etc.
- Manage specific Storage Bins and locations within each warehouse / store for granular, precise tracking of all items, from a single spare part to a reel of security paper
- Stock Type Management: The system must natively manage, track and report on the distinct stock types e.g., Raw Material, Semi-Finished Goods (SFG), Finished Goods, Suspected sheet (PS) and Full Waste (FW), with separate handling and accounting rules
- Batch/Lot Tracking: Implement Unique Batch/Lot management for all secured materials (paper, ink) and finished banknotes. End-to-end traceability is mandatory requirement that is expected to enable mitigation of quality and resource issues, assists in audit compliance, etc.
- Inventory Transactional Control: Must support the following principles for issue decisions concerning chemicals, inks and other time-sensitive materials:
  - First Expired First Out (FEFO)
  - First In First Out (FIFO)
  - Last In First Out (LIFO)
- Stock Transfers: Manage all internal stock transfers (e.g., from Paper Store to Offset Strong Room, from Intaglio to Sheet Strong Room) with enforced electronic approvals, automated documentation and execution via barcode scanning devices (e.g. Zebra Devices) to eliminate errors
- Scheduling, executing and reconciling cycle counts and full physical inventories

- Must have a comprehensive Item Master option with all relevant details associated with but not limited to:
  - Inventory management
  - Planning
  - Financial
  - Purchase / Sales Orders
  - Manufacturing
- Must support multiple UOM i.e. other than primary UOM for Purchase & Sales processing
- Should be able to have multiple item categorization based on item types, purchase & sales perspective etc. for reporting and costing purpose

### 5.2.1 Non-Secured Material Stores (NSMS):

- Process Management: Digital handling of the entire lifecycle, from Material Requisition Forms (MRF) to Purchase Requisitions (PR) and final Material Issuance
- Store Differentiation: Clear system demarcation and separate process flows for the General Store, Engineering Store and Chemical Store
- Stockable vs. Non-Stockable Items: Automated, distinct process flows where:
  - Stockable Items: Functionality must support auto monitoring of stock levels against predefined min/max and safety stock levels and auto generation PRs for replenishment.
  - Non-Stockable Items: The system routes user-initiated MRFs directly through the approval chain to procurement, with the store acting as a coordination point
- Support for Location / Bin Management
- Should be able to capture data using barcode readers to eliminate manual ledger entry
- Receiving & Inspection:
  - Seamless integration with Purchase Orders
  - Quality Control (QC) checks with hold functionality
  - Generation of digital Material Inspection Reports (MIR) and Material Receipt (MR) reports
  - Return to Supplier functionality
  - Incoming materials must be scannable against PO lines for rapid and accurate verification.

### 5.2.2 Secured Material Stores & WIP Management

This module is critical and demands the highest level of granularity and control

- Raw Material & WIP Management
  - Track receipt from external suppliers, issuance to production and maintain real-time balances.
  - Provision for lot / serial enabling for tracking of each lot from receiving to consumption
  - Traceability of each lot to the production / printing batches

- The system must provide granular, reel/ream-level tracking of all secured material as it moves through the production strong rooms (Offset, Intaglio, Sheet & Numbering, CF&P, etc.).
- Drying Time Management: Systematically track mandatory drying times for printed reams (e.g., 72 hours standard, 12 hours with heating chamber). The system must automatically enforce this by placing reams in a "Drying" status block with a system-held timestamp and prevent their issuance for the next process until the configured drying period has fully elapsed and acknowledged by the user. The system should also provide flexibility to user for entering standard drying time product-wise as it may vary from product to product. Provision for 'Unblocking' before drying time by the authorized user is required

### 5.2.3 System-Generated Alerts & Notices

The ERP must facilitate the management of automated alerts and flags at critical stages to prevent operational disruptions. This includes:

- Minimum and Critical Stock alerts for critical inventory items.
- Items Expiry and Shelf-life alerts
- Pending Approval reminders
- Purchase Order Delivery Delays
- Slow-Moving and Obsolete Stock flags
- Excessive Consumption alerts against historical trends

### 5.2.4 Reporting & Analytics

The system must provide, at a minimum, the following standard reports and a customizable report builder for ad-hoc analysis. All reports should be flexible and filterable by multiple dimensions:

- Stock Movement & Balance Report
- WIP Aging & Status Report
- Batch Traceability Report including lot traceability for batches and issued items
- Stock Ledgers for all stores and strong rooms
- ABC/XYZ Analysis Report
- Consumption Trend Analysis
- Procurement Performance Reports
- Supplier Performance Report
- Slow-Moving / Fast-Moving Items Report
- Expiry and Obsolete Stock Report
- Real-time Executive Dashboards with KPIs (Inventory Value, Critical Spares Availability, Procurement Cycle Time, WIP Turnover)
- Scanning the Audit Trail Report to trace every user action performed via a handheld device

## 5.3 Order to Cash

Fully integrated Sales and Order Lifecycle Management System. This solution will serve as the digital backbone for all customer-facing and order-fulfillment activities. The system must seamlessly orchestrate processes from the initial customer engagement through to final delivery to cash realization, ensuring data integrity, process efficiency and complete visibility across all departments

### 5.3.1 Customer & Stakeholder Management

- Unified Customer Master Database: Establish a single, authoritative source for all customers and stakeholders' information
- Hierarchical Customer Profiling: Customer sites, Parent Child relationship, etc.
- Provision for multiple Customer Categories
- Customer Portal (Future-State Ready): The system architecture must include the foundational elements for a future-phase, secure customer portal. This portal will allow customers to submit requests, track order status, view historical transactions, download invoices and approve designs electronically

### 5.3.2 Quotation Management (Pre-Order):

- Functionality should include end to end capture of Order Cycle from inquiry, offer, quotation, customer agreement to order creation
- Sales team should be able to send multiple offers to customers against the single requirement e.g. Customer may ask for x quantity while sales team can offer different rates for x quantity and x + additional quantity

#### 5.3.2.1 Configurable Quotation Process:

- **Yellow Sales Order (YSO) Digitization:** Replace the physical form with a dynamic digital YSO. This form must support configurable fields for document specifications, multiple security feature selections and customer-specific instructions
- **Automated Task Generation:** Upon YSO submission, the system must automatically generate tasks and notifications for the Production and Design departments, attaching all relevant digital assets (e.g., customer logos, reference documents)
- **Quote Generation & Approval:** Integrate cost data to allow for margin calculation. Support a multi-level electronic approval workflow (e.g., Indent Holder -> Senior Manager Sales -> Director Supply Chain) for the final price proposal. Generate and email professionally branded quotations directly from the system

#### 5.3.2.2 Pricelist Management

- Should have the provision of maintaining timebound Pricelist (Item-wise, customer-wise, Category-wise, etc.)
- Pricelist should be able to qualify against customer, Item, Item Category
- Pricelist should have restricted predefined access control
- Price Change Restrictions on Sales Orders

### 5.3.3 Design, Proofing & Customer Approval Management:

- Centralized Design Briefing: Provide the Design department with a centralized view of all active design requests, complete with all customer requirements and attached assets from the digital YSO

- **Digital Proof Submission & Version Control:** Designers must be able to upload design proofs (computer prints) directly into the system. The system must maintain full version control, storing every iteration of the design with timestamps and user identification

#### 5.3.4 **Structured Customer Approval Cycle:**

- Provide a mechanism to electronically send design proofs to the customer (via a secure, branded web link or encrypted email)
- The system should allow customers to provide feedback directly on the proof (e.g., via comments or annotations) and formally "Approve" or "Reject with Revisions."
- Automatically trigger notifications to the sales team and designers based on customer action

#### 5.3.5 **Final Order Processing & Factory Integration**

- **Order Confirmation Triggers:** The system must enforce business rules, preventing the creation of a Final Sales Order (FSO) until key prerequisites are met: a) Customer Design Approval and b) Confirmation of Advance Payment (via integration with Finance)

#### 5.3.6 **Automated FSO & FO Generation:**

- Upon confirmation, the system must auto-generate a legally binding Final Sales Order (FSO), pulling all agreed-upon specifications from the approved quotation and design.
- Simultaneously, the system must generate a detailed digital Factory Order (FO) and transmit it automatically to the Production Department's ERP system. This FO must include all technical and logistical details required for execution.
- **Real-Time Order Tracking Dashboard:** Provide a unified dashboard for sales, production, and management to view the real-time status of every order (e.g., Design in Progress, Awaiting Customer Approval, Payment Pending, In Production, Quality Check, Packing, Dispatched)

#### 5.3.7 **Post-Order Fulfillment & Logistics Coordination**

##### 5.3.7.1 **Packing & Dispatch Integration:**

- Receive notifications from the Packing department upon order completion
- Generate digital Packing Lists and Delivery Notes within the system, pre-populated with order details
- **Capture courier tracking numbers and dispatch dates, automatically updating the order** status and notifying the customer
- **Complaint Management Module:** A structured process to log customer complaints, link them to the specific order and batch, assign them for investigation, track resolution progress and record the final outcome

#### 5.3.8 **Configurable Product & Quotation Engine:**

- **Product Catalog with Variants:** A central product catalog capable of handling complex, configurable products (e.g., a "Certificate" product with variants for Paper Type, Security Features, Size). Each variant must correctly impact the cost and price.
- **Approval Workflow Engine:** A drag-and-drop or highly configurable workflow engine to define and enforce approval chains for quotes, pricing exceptions, and contract terms.

- **Document Generation and Management:** Automated generation of professional documents (Quotations, Proforma Invoices, FSOs) from templates, with digital signature capture capabilities for internal approvals

### 5.3.9 Design Collaboration Hub

- **Digital Asset Management (DAM):** A secure repository to store and manage customer logos, artwork, approved designs and other digital assets with check-in/check-out functionality to prevent version conflicts
- **Online Proofing Tools:** Integration with or built-in capabilities for online proofing, allowing stakeholders to comment, annotate and mark up designs directly in the browser

### 5.3.10 Logistics & Dispatch

Banknote & OSP Logistics: Manage the dispatch process from multiple PSPC sites:

- Facilitate delivery requests against sales orders
- Delivery scheduling (planning not required)
- Incorporation of customer instructions
- Stock reservations against deliveries and their validations at the time of dispatches
- Generation of pick slip, delivery notes / challans
- Provision for reference and related shipping document attachments
- Auto alert to salespersons and customers through email
- **Packing & Dispatch Workbench:** A centralized screen to manage outgoing shipments, scan boxes / pallets before loading and auto-generate all shipping and legal documents (TR series, Packing Certificates, Delivery Notes)
- **Packing Certificate Generation:** Ability to create and print customized packing certificates based on the scanned contents of boxes/cases, pulling data directly from the Factory Order (Sales Order)

### 5.3.11 Production & WIP Tracking

- **Factory Order Integration:** Ability to create, release and track Factory Orders (Sales Order), consuming raw materials and building SFG/FG
- **Real-time Feedback:** Real-time tracking of material issuance to production and receipt from production via barcode scans, providing live production status
- **Yield and Waste Reporting:** Track and report yield, waste (suspected sheets, Full Waste) and other production variances at each stage against standard expectations

### 5.3.12 Account Receivable:

- Account billing (invoicing) should have the functionality as indicated in Account Receivable section in Finance and Accounts

### 5.3.13 Advanced Reporting & Dashboard Module

- The system must provide out-of-the-box and fully customizable reports, including but not limited to:

- **Sales Performance Analysis:** Product-wise profitability, customer lifetime value, indent holder performance against targets
- **Operational Efficiency Reports:** Average time per stage (Quotation-to-Order, Design Cycle Time, Production Lead Time), bottleneck analysis
- **Financial Reports:** Outstanding Balance & Aging Report, Historical Payment Performance by Customer, Revenue Recognition reports
- **Customer Intelligence Reports:** Year-wise historical sales data, product adoption trends, customer satisfaction scores from complaint resolution
- **Real-Time Executive Dashboards:** Configurable KPI widgets for management, displaying Live Order Pipeline, Top Customers YTD, Order On-Time Delivery Rate, Quote Conversion Ratio, and Aging Orders
- **Exception Reporting:** Should highlights exceptions against standards / expectations with alerts

## 5.4 Production Planning & Execution (PP-PE)

The ERP must provide an integrated and closed-loop planning and execution system that manages the transition from an annual production directive to a physically dispatched, high-security product. The system must support both the repetitive, high-volume manufacturing of banknotes and the order-driven production of Other Security Products (OSP)

### 5.4.1 Production Planning & Scheduling

- **Strategic & Master Planning**
- **Annual Production Plan (APP):** Capture and manage the yearly multi-denomination production targets Bank Notes as well as other customers. Must be the single source of truth for all production planning activities.
- **BOMS, Recipes:** Define and manage multi-level BOMs, Recipes for all products.
- **Work Centers:** Define all critical areas (Offset Press, Intaglio Press, Examination Tables, Numbering Machines, Cutting Machines, Varnishing Lines) with associated capacities, cost centers and personnel information
- **Operations & Routings:** Create detailed, step-by-step operational sequences for each product. (Banknotes: Raw Paper -> Printed Sheets (Offset) -> Printed Sheets (Intaglio) -> Examined Sheets -> Numbered Sheets -> Cut Bundles -> Packed Boxes), etc.
- **MRP** to generate planned orders for finished goods (banknotes, OSP) based on the MPS, which then explode into dependent requirements for raw materials (security paper, inks, varnishes). Must support MRP 2 concepts
- **Production Planning:** Generate Planned Production Orders for the factory and Planned Purchase Requisitions for procurement, ensuring raw material availability aligns with the production schedule
- **Scheduling & Capacity Leveling:**
  - Convert planned orders into detailed Production Orders with scheduled start and end dates for each operation
  - Provide finite-capacity scheduling tools to optimize the use of bottleneck resources (e.g., Intaglio Presses, Numbering Machines) and to visualize potential conflicts
- **Sales & Operations Planning (S&OP):** Provide a monthly S&OP process
  - **Sales Estimates** from Sales
  - **Offer** from Operations
    - Capacity planning, raw material (paper, ink) availability and budget constraints, producing a validated Master Production Schedule (MPS).
  - **SOP:** Agreed figures
- **Dashboard Reporting:**
  - **The system must be capable of gathering the planned vs the actual production and provide a dashboard overview from every stage of manufacturing providing the latest status of the WIP and Finshined Product inventory levels.**

## 5.5 Integrated Quality Management (QM)

Quality control is not a separate function but is fully integrated into every step of the production process. The ERP must enforce quality gates and provide tools for defect analysis and prevention

### 5.5.1 In-Line Quality Inspection & Process Control

- **Inspection Plans:** Create detailed inspection plans that are automatically triggered at defined operations in the routing
- **Offset Printing:** Checkpoints for ink shade, registration and alignment. The plan should define sampling procedures (e.g., random sampling from pallets)
- **Intaglio Printing:** Checkpoints for impression depth, clarity and pressure
- **Numbering:** Checkpoints for sequence accuracy, print quality and smudging
- Inspection Lot Creation & Management:
  - The system must automatically create an inspection lot for each quality-relevant operation (e.g., after Offset printing and after Intaglio printing).
  - Quality inspectors must record results directly in the system using tablets or shop-floor terminals, capturing defects against pre-defined catalogues (e.g., "Blurred Print," "Missing Number")
- Usage Decision:
  - Based on the inspection results, a qualified supervisor must make a usage decision in the system:
    - Accept: The batch moves to the next operation or is granted "Unrestricted Use" status.
    - Rework: The batch is routed to a rework operation (e.g., Retouching in Examination). The system must track rework time and costs.
    - Reject: The batch is scrapped (moved to "Blocked Stock") and flagged for shredding.

### 5.5.2 Final Quality Assurance (QA) & Dispatch Authorization

- Pre-Dispatch Inspection:
  - Enforce a mandatory 100% inspection or a statistically valid sampling process on finished, packed boxes before they are moved to the final dispatch vault
  - This final QA check must be recorded in the system, and only upon a "QA Pass" status can the stock be updated to "Available for Dispatch."
- Non-Conformance Management (NCM) & CAPA:
  - Provide a structured system to record all defects identified during in-process and final inspections
  - Classify non-conformances by severity (Minor, Major, Critical) and point of origin
  - Initiate and track Corrective and Preventive Actions (CAPA), linking them to specific non-conformances to drive continuous improvement
  - Generate high-quality performance reports for management review, including defect Pareto charts and vendor quality performance metrics

### 5.5.3 Lot Traceability

- The ERP must provide full lot traceability from the raw material batch (paper roll, ink batch) through every production order and operation, right down to the final packaging

- This is critical for quality recalls, defect investigation and meeting the supreme audit requirements of a security printer

## 5.6 Plant Maintenance

Comprehensive, integrated **Plant Maintenance Management System**. The solution must digitize and optimize the entire maintenance lifecycle, from fault detection to refurbishment, across Mechanical, Electrical and Utility departments. A core requirement is the integration of **IoT sensor data** to enable predictive maintenance and transform reactive processes into proactive, data-driven operations

### 5.6.1 Core Maintenance Management

- **Asset Registry:** A centralized equipment registers with hierarchical structures (Plant -> Line -> Machine -> Component), capturing all technical specifications, manuals and warranty information
- **Mobile-Option:** Technicians must be able to receive, execute and update work orders (including time logging, parts consumption, and completion notes) via ruggedized handheld devices or tablets, both online and offline
- **Shift Handover Module:** A digital log for technicians to record ongoing issues, work-in-progress and critical notes for the next shift, ensuring continuity

### 5.6.2 Maintenance Request & Work Order Management

- **Digital Complaint/Request Intake:** Replace all paper-based "Complaint Forms" with a digital system accessible to machine operators and floor staff. Requests must be categorizable by department (Mechanical, Electrical, Utility), machine, priority and fault type
- **Automated Work Order Generation:** The system must automatically generate a digital Work Order from a validated maintenance request
- **Work Order Lifecycle Management:** Manage the full lifecycle of a Work Order: Open -> Assigned -> In Progress (with status updates) -> Awaiting Parts -> On Hold -> Completed -> Closed. Each status change must trigger relevant notifications.

### 5.6.3 Preventive Maintenance (PM) Module

- Configurable Maintenance Plans:
  - Time-Based PM: Create plans triggered by fixed time intervals (e.g., daily, weekly, monthly). The system must automatically generate PM work orders based on these schedules
  - Performance-Based PM: Create plans triggered by usage meters (e.g., after every 1,000,000 impressions, 500 operating hours). The system must have the provision to integrate with machine PLCs or manual meter readings to trigger these work orders
  - PM Task Library: Maintain a standard library of PM tasks, checklists, safety procedures and required tools/spares for each equipment type, which are automatically attached to generated PM work orders

### 5.6.4 Corrective Maintenance Module

- **Planned Corrective Work Orders:** Manage non-emergency repairs identified through inspections or PMs. This module should support detailed planning, including estimated labor hours, part requirements and scheduling to minimize production disruption

- **Integration with Spare Parts Management:** Link corrective work orders directly to the inventory system for parts reservation, issuance and reorder triggers

#### **Breakdown Maintenance Module**

- **Emergency Response Workflow:** Streamline the process for immediate, unplanned repairs. The system must allow for request creation, rapid assignment, part reservation and priority escalation
- **Root Cause Analysis (RCA) Integration:** Upon completion of a breakdown work order, the system must prompt technicians and supervisors to log the root cause, work performed and parts used, building a knowledge base for future failure prevention

#### **5.6.5 Planning & Scheduling**

- **Graphical Scheduling Board:** A drag-and-drop Gantt-style interface for planners to visualize and schedule maintenance tasks, assign resources (technicians, contractors) and manage resource capacity
- **Resource & Skills Management:** Manage technician skill sets and certifications to ensure the right person is assigned to the right job

#### **5.6.6 Refurbishment & Spare Parts Management**

- **Seamless ERP Integration:** Bi-directional integration with the core ERP/Inventory modules for real-time stock level checks, parts reservation, issuance and automatic generation of planned purchase requisitions for non-stock items or when stock falls below minimum levels
- **Refurbishment Tracking:** Functionality to track parts identified for refurbishment. This includes:
  - Tagging repairable parts upon removal from a machine.
  - Tracking the part through the internal/external refurbishment process
  - Updating the inventory system upon completion, marking the part as "Refurbished" and available for re-use, with a new lifecycle record
- **Spare Parts Cataloguing:** Integrate with the inventory system to maintain a detailed catalog of spare parts, including OEM details, specifications and compatibility with specific machines

#### **5.6.7 Embedded Systems & Internet of Things (IoT) Integration for Predictive Maintenance**

- **IoT Data Ingestion Platform:** The system must include or integrate with a platform capable of ingesting real-time data streams from IoT sensors (vibration, temperature, pressure, humidity, energy consumption) and machine PLCs/Embedded Systems.
- **Condition Monitoring Dashboards:** Provide real-time dashboards visualizing the health status of critical equipment, with color-coded alerts (Green, Yellow, Red) based on predefined thresholds
- **Predictive Alert Generation:** The system must be capable of generating automatic maintenance alerts or preliminary work orders when sensor data trends indicate an impending failure (e.g., rising bearing vibration, abnormal motor temperature), enabling intervention before a breakdown occurs
- **Sensor-to-Maintenance Workflow:** Automatically create a maintenance task or notification in the CMMS when a predictive alert is triggered, linking directly to the relevant asset and historical data

### 5.6.8 Reporting, Analytics & Notification Mechanism

- Centralized Notification Engine: A configurable system to send automated notifications via SMS, Email and in-system alerts for:
  - New maintenance requests and work order assignments.
  - Escalation alerts for overdue or high-priority jobs.
  - Low stock alerts for critical spares.
  - Predictive maintenance alerts from IoT systems.
  - PM schedule reminders
- Comprehensive Reporting Suite: The system must provide standard and customizable reports, including:
  - Mean Time Between Failure (MTBF) & Mean Time To Repair (MTTR) for critical assets
  - Department-wise Maintenance Performance (Breakdown vs. Preventive vs. Corrective).
  - Spare Parts Consumption & Cost Analysis
  - Overall Equipment Effectiveness (OEE) and downtime analysis
  - Backlog Reports and resource utilization
  - IoT Sensor Health and Alert History reports
- Real-Time Executive Dashboards: Graphical overviews for management showing Key Performance Indicators (KPIs) like Plant Uptime, Maintenance Cost vs. Budget, Pending Work Orders, and Critical Asset Health Status

### 5.6.9 Security, Compliance & Administration

- **Role-Based Access Control (RBAC):** Granular permissions based on organizational roles (Operator, Technician, Planner, Maintenance Manager, etc.), controlling access to assets, work orders and financial data
- **Audit Trail:** A complete, unalterable log of all system transactions, including work order changes, part issues and user actions for compliance and audit purposes

## 5.7 Finance & Accounts

The ERP must provide a fully integrated, real-time financial management suite that serves as the single source of truth for all monetary and management accounting activities. The system must ensure strict financial control, accurate product costing, and comprehensive reporting in line with both International Financial Reporting Standards (IFRS) and local statutory requirements

### 5.7.1 General Ledger (GL) Accounting

#### 5.7.1.1 Master Data Management:

- **Chart of Accounts:** Maintain a multi-tiered Chart of Accounts supporting legal, group, and country-specific requirements. It must allow for detailed segment reporting by Company Code, Business Area (Banknote vs. OSP), Cost Center, Product, Project, etc.

- **Account Determination:** Automatically determine the correct G/L accounts for postings based on pre-defined chart of account mapping against transaction types (e.g., raw material consumption, production overheads, sales revenue)

#### 5.7.1.2 Period-End Close:

- Provide a centralized task management tool to manage, monitor and document the entire financial closing process
- Automated Allocations: Execute recurring journal entries, indirect cost allocations (Assessment/Distribution Cycles) and currency revaluations automatically according to a pre-defined schedule
- Accrual Engine: Support period-end accruals for expenses like utilities, services and warranties, with the ability to reverse them in the following period
- Must provide module level closing i.e. Sub-Ledgers and General Ledgers

### 5.7.2 Accounts Payable (AP)

#### 5.7.2.1 Invoice Processing Workflow:

- **Three-Way Match Enforcement:** The system must be configured to block payment for any invoice that does not perfectly match the PO and GRN within defined tolerances (price, quantity). Discrepancies must route through a dedicated workflow for resolution by procurement or the requesting department
- **Duplicate Invoice Check:** Automatically flag and block duplicate invoices based on invoice number, vendor and amount
- **Automated Data Capture:** Integrate with OCR (Optical Character Recognition) technology to automatically capture header and line-item data from scanned paper invoices, reducing manual entry

#### 5.7.2.2 Payment Management & Execution:

- **Payment Program:** Execute mass payment runs with support for all standard methods (EFT, Cheques, Wire Transfers). The program must propose payments based on due dates, cash discount terms and payment blocks, etc.
- **Payment Advices & Reconciliation:** Automatically generate electronic payment advices and transmit them to vendors. Support the generation of payment files in formats required by Pakistani banks (e.g., 1Link).
- **Petty Cash Management:** Manage petty cash custodians and impress funds. The system must require digital expense reports with scanned receipts, enforce approval workflows, and automatically replenish the fund upon approval

#### 5.7.2.3 Vendor Management:

- **Central Vendor Master:** Maintain a single vendor master record used across all company codes, with controls for duplicate creation
- **Withholding Tax (WHT) Compliance:** Automatically calculate WHT at the invoice posting stage based on vendor type and nature of supply and generate WHT certificates (Form 21/22) in the prescribed FBR format
- **Vendor Portal:** Provide a secure portal for vendors to view their POs, submit invoices electronically and check payment status

### 5.7.3 Accounts Receivable (AR) & Billing

#### 5.7.3.1 Customer & Credit Management:

- **Central Customer Master:** Maintain comprehensive customer records with hierarchy structures for bank branches or government departments
- **Automated Credit Checks:** Implement automatic credit limit checks during sales order entry. The system should block order fulfillment if a customer exceeds their limit / have overdue invoices. Restricted release functionality with reason code

#### 5.7.3.2 Billing & Revenue Recognition:

- **Bill integration with Customer order:** All customer billing (invoices) to be well integrated with Order Management ensuring all related information like customer info, product info, product rates, discounts, surcharges etc. are available on customer invoices
- **Billing Plan Integration:** For complex OSP contracts, manage milestone-based or periodic billing using billing plans. The system must support IFRS 15 revenue recognition principles, automatically calculating and posting deferred revenue
- **Intercompany & Intracompany Accounting:** For Banknote production, correctly account for stock transfers to SBP using internal orders or intercompany stock transfer orders, ensuring proper valuation and elimination

#### 5.7.3.3 Dispute & Collection Management:

- Provide tools to track customer disputes, deductions and collection activities, aging receivables by due date

### 5.7.4 Asset Accounting (AA):

#### 5.7.4.1 Asset Lifecycle Management:

- **Asset Addition:** Ability to manage addition of all new assets
- **Capital Work in Progress (CWIP):** Manage capital projects using, capitalizing all related costs (material, internal labor, external services). Upon project completion, automatically settle to a fixed asset
- **Depreciation Simulation & Posting:** Calculate monthly depreciation using multiple methods (e.g., Straight-Line, Declining Balance) for both book and tax purposes. Support half-year convention, partial period depreciation, revaluation, cost adjustments
- **Asset Retirement & Transfer:** Manage asset retirement (scrapping, sale) and transfers between cost centers, company codes, etc. maintaining a complete history

#### 5.7.4.2 Maintenance Integration:

- Link fixed assets to the Plant Maintenance (PM) module to track maintenance history and costs, providing a total cost of ownership view for critical printing presses

### 5.7.5 Cash Management:

#### 5.7.5.1 Cash Position & Liquidity Forecast:

- Provide a real-time cash position dashboard consolidating data from all bank accounts and company codes

- Generate a short to medium-term liquidity forecast by integrating data from Accounts Payable (outgoing payments), Accounts Receivable (incoming payments) and Purchase Orders (commitments), Sales Order (Booked)

#### **5.7.5.2 Bank Communication Management:**

- Automatically import electronic bank statements (EBS) and reconcile them with system-posted items, highlighting unmatched items for investigation
- Manage all bank account details and signatory information within the system

#### **5.7.6 Letter of Credit (LC) & Bank Guarantee Management:**

- **Model the LC lifecycle:** application, issuance, amendment, utilization (against PO and incoming invoice) and settlement. The system must track LC charges, commissions, and margins separately

#### **5.7.7 Product Costing:**

##### **5.7.7.1 Costing Method:**

- Must support various product costing methods:
  - Moving Averages
  - Period Moving Average
  - Standard Costing
  - Activity Based Costing

##### **5.7.7.2 Costing Master Data:**

- **Cost Centers:** Define all departments as cost centers (e.g., CC-Offset-Printing, CC-Quality-Control) for overhead cost collection
- Should be able to automatically transfer material, labor and overhead cost to product during recording of operation activities
- Functionality should provide for predefined cost for wastage that will enable partial cost transfer to product
- Provision for defining various overheads like Utility, Depreciation, Admin costs, etc. Each overhead will need to be mapped with chart of account. Should be able to define Rates per units for each overhead type
- **Activity Types:** Define the activities performed (e.g., Machine Hours - Intaglio, Labor Hours - Examination) and assign planned prices per hour

##### **5.7.7.3 Product Cost Planning:**

- **Quantity Structure:** Automatically pull the BOM and Routing for any material to calculate its standard cost.
- **Costing Sheet:** Configure a costing sheet to apply overhead to the product cost based on direct material and labor (e.g., apply a % overhead for machine depreciation, building rent)
- Use Assessment Cycles to allocate costs from support cost centers (e.g., HR, IT) to production cost centers.
- Use Distribution Cycles to distribute costs based on statistical key figures (e.g., distribute IT costs based on the number of PCs).

### 5.7.8 Profitability Analysis:

- Should be able to view and analyze profitability against key dimensions like Company, Product line, Product, Customer, Sale Order, etc.
- Value Fields: Define the key figures to be analyzed, such as Revenue, Cost of Goods Sold (COGS), Administrative Expenses and Contribution Margin

### 5.7.9 Financial Budget:

#### 5.7.9.1 Recording Annual Budgets:

- Should be able to enter multilevel financial Capital and Revenue budgets against Cost Centers / Departments
- Approval workflows against HR / independent hierarchy for each capital and revenue budget. Transactions restricted to approved budgets only
- Provision for linking Purchase Requisition to budgets. Allow PRs only against balance approved amount
- Provision for shifting of budget from one head to another
- Maintenance of contingency budget that can be utilized against excess expenditure against any existing budget or for a unplanned capital expenditure
- Changes in budget to be allowed against restricted access control & through authorized workflow
- Functionality for Reversal of budget amount should be there
- Monitor and control costs for specific, time-limited projects like R&D, marketing campaigns, or major maintenance overhauls, comparing actual costs against the project budget.
- Analysis & Status Dashboard should be available to:
  - Monitor job progress against each budget
  - Status report with budget amount, job in progress, job completed, etc.

### 5.7.10 Financial Reporting, Tax & Compliance

#### 5.7.10.1 Financial Statement Reporting:

- Pre-configure and automatically generate the complete suite of financial statements (Balance Sheet, P&L, Cash Flow) in both corporate and FBR-prescribed formats

#### 5.7.10.2 Management Reporting & Dashboards:

- Should be able to generate financial statements on multiple dimensions, like product lines, products, Printing Units, etc.
- Provide real-time, role-based dashboards for management with KPIs like:
  - Exception reporting and analysis
  - Production Cost per Thousand Notes (by Denomination)
  - Departmental Budget vs. Actual
  - Profitability Analysis

### 5.7.10.3 Tax Compliance:

- Automatically calculate GST at the point of billing for OSP, generate Sales Tax Invoices, and file periodic Sales Tax returns in the FBR-prescribed format
- Auto application of Combo tax e.g. Standard Tax + Further Tax + WHT, on sales invoices and purchase orders based on product type, customers, region etc.
- Withholding Tax: As detailed in AP, automate the entire WHT lifecycle from calculation to certificate generation and reporting
- Income Tax: Facilitate corporate income tax provisioning and return preparation based on the system's financial data

### 5.7.10.4 Other General Considerations for GL

- Tracking of GL journals to actual transactions
- Restriction on Deletion of GL data. Reversal journals should be allowed

### 5.7.11. Investment Management

Recording of investments, accrual of income, mark to market analysis, maturity profile

## 5.8 HRM Module & Sub-Modules

The proposed HCM module must be a **deeply integrated, native component** of your ERP suite that addresses the following functional areas

### 5.8.1 Core HR & Organizational Management

- **Employee Master Data:** A single, centralized employee record within the ERP
- **Organization & Position Management:** Define the organizational hierarchy, positions, and reporting lines that will be used across all ERP modules
- **Employee Lifecycle Management:** Digital workflows for all employment changes
- **Integration:** Seamless data flow to the ERP's Finance and Project Management modules for accurate costing and payroll

### 5.8.2 Technical & Integration Requirements

#### 5.8.2.1 Deployment:

- The HCM module must be a native, seamlessly integrated component of the proposed ERP suite. Vendors must confirm that all sub-modules listed in Section 4.2 are part of a single, unified platform, not a collection of bolted-on or third-party applications

### **5.8.2.2 Native Integration:**

- The HCM module must share a common database, security model and workflow engine with the ERP's Finance, Supply Chain and Procurement modules
- Organizational Hierarchy: The hierarchy defined in HCM must be instantly available and used for all approval workflows across the ERP (e.g., Procurement Requisitions, Financial Delegations)
- Cost Center & Project Costing: Employee data and leave records must be inherently linked to cost centers and projects for real-time financial and managerial accounting
- Unified User Experience: A single, consistent UI and navigation must exist between HCM and all other ERP modules

Please note that the above is the requirement of HR is for Phase 1, while the proposed ERP should have native functionalities available for HR modules as indicated in section 4.2 (Future Prospect Modules)

## **5.9 General Functional Considerations for ERP**

### **5.9.1 Integration:**

- Must be a fully integrated application
- A single, unified source of truth across the organization
- Seamless, real-time data flow between modules (e.g., Inventory valuation updates the General Ledger upon Goods Receipt)

### **5.9.2 Workflow**

- A configurable, multi-tiered electronic approval workflow supporting:
  - Both HR and Independent Hierarchy
  - Sequential, Anyone, Parallel actions / approvals
  - Conditional workflow that can be applied for authority matrix, conditional hierarchical approvals
  - Should be able to attach workflows to any critical document
  - Workflow status and historical visibility

### **5.9.3 User Experience:**

- A modern, intuitive and mobile-responsive user interface consistent across the entire ERP platform
- User friendly access & navigation
- Availability of Critical Information on logins
- Frequently used / Preferred tasks distinct navigation
- Provisions for user defined fields on all major screens

#### 5.9.4 Optimized Interface

The user interface should be optimized for Secure web based access for local and remote access on VPN to the authorized users.

#### 5.9.5 Reporting & Analytics:

- Standard Reports: Standard reports should be available for all critical information e.g. Monthly Stock Balance, Production & Costing, Ink Schedule, Slow/Fast Moving Items, operational
- Standard Dashboards: Standard and customizable Dashboards for all critical information giving trends, comparative statements, exception reporting
- Must support flexible criteria for reports and Dashboards
- Functionality for scheduling and emailing reports and Dashboard.

#### 5.10 Manufacturing Execution & Shop Floor Control

The ERP must provide real-time visibility and control over the entire manufacturing process, with a particular focus on the unique, secure and auditable movement of banknotes through various strong rooms and departments

- Production Order Management:
  - ERP must provide full functionality of Production Order Management, including scheduling based on floor, shift, production, references to sales order / forecast, make to order linking, labor assignment, etc.
  - Order Release: Officially release scheduled Production Orders to the shop floor, making them executable. This release should trigger material reservations in the respective secured stores (Paper & Ink Store, WIP Strong Rooms).
  - Print Shop Paper/Component Issue: Record the issuance of raw materials (e.g., blank paper reams from Paper Store) to the production floor against the specific Production Order. This must include 100% count verification by ILD counters, recorded directly in the system.
- Operation Confirmation & Real-Time Progress Tracking:
  - After each operation in the routing, operators must perform a confirmation in the system. This confirmation must capture:
    - Actual Quantities: Record output categorized as Good, Suspected Sheets (SS), and Full Waste (FW)
    - Actual Times: Machine hours and labor hours consumed
    - Actual Material Consumption: Quantity of ink, varnish, or other consumables used.
    - Scrap/Waste Reasons: Pre-defined codes for recording the cause of waste (e.g., misprint, registration error, tearing)
    - Utility Consumptions Record actual or assumption based (over heads) utility consumption
    - Backflush provision should be there for each stage of consumption and for all elements of production including material, labor, over heads & utilities

Following general processes are mentioned for Bank Note printing. Apart from these, other products involve other processes too like Smart Card manufacturing involves lamination and Inlay

insertion. Bidders are expected to study all the processes of all the products and provide appropriate solutions.

- **Offset Printing:** Confirm receipt of blank paper, record good printed sheets and categorize waste. The system must automatically trigger a drying period (e.g., 72-hour hold) before the next operation can be confirmed
- **Intaglio Printing:** Confirm receipt of offset-printed sheets, record sound output from back and front printing and manage the subsequent drying cycle
- **Examination:** This is a critical data collection point. The system must allow for the recording of:
  - Good Sheets: Count of sheets passing visual inspection
  - Suspected sheet (SS): Count of sheets marked for rework (retouching). The system must manage the rework process and re-introduction of corrected sheets
  - Full Waste (FW): Count of sheets deemed irreparable and sent to shredding. The system must record the shredding event
- **Numbering & Varnishing:** Confirm the receipt of examined sheets. Record good numbered output and suspected identified by the CNP machine or manual inspection.
- **Cutting & Packing:** Confirm the receipt of numbered sheets. Record the output of final cut bundles and their packing into sealed boxes. The system should ideally support four-corner counting verification and matching of numbering sequences
- **WIP and Strong Room Management:**
  - The system must treat the Offset Strong Room, Intaglio Strong Room and Sheet & Numbering Strong Room as formal inventory locations within the ERP
  - Every physical movement of sheets between these strong rooms and production departments must be recorded as a stock transfer in the ERP, driven by a Job Letter or system-generated transfer order, ensuring a complete and auditable chain of custody
- **MES Dashboard: Real-Time Performance Monitoring:**
  - Provide real-time dashboards for production managers showing:
    - Order status (Not Started, In Process, Completed, Closed).
    - Overall Equipment Effectiveness (OEE) for critical machines.
- Daily production vs. plan.
- Real-time scrap and suspected sheet analysis

## **6 Technical, Architectural & Security Requirements**

### **6.1 Technology:**

- Proposed ERP / Support Solutions including track & Trace should be hosted 'On-Prem'. Cloud solutions will automatically disqualify.
- The proposed ERP solution should support integration with On-prem Microsoft Active Directory via LDAP over TLS protocol.
- Technology in all aspects should not have an 'End of Support' during the entire period of contract.
- Technology / ERP version should be the most recent stable and not older than latest -1
- Technology should be compatible & scalable with latest trends in technology like Artificial Intelligence (AI), Automation, IOT
- The proposed solution should comply with industry standards for integrations with other systems and connectivity with IOT sensor and hardware of note printing and counting machines, data capturing devices like OCR readers, barcode readers, etc.
- Should be accessible through mobile devices like Hand Held Terminals HHT, Tablets etc. within the intranet, for performing task / Viewing

### **6.2 Integration:**

- ERP will have Bi-directional sync through robust and secure APIs (REST/SOAP) or pre-built connectors with:
  - Inhouse built supporting applications developed in APEX
  - IBM KM Application: Document, Memos, Employee Data
  - Track & Trace Applications: Inventory, operational, engineering data
  - Middleware for FBR portal for exchange of required sales invoice data
  - Other APIs, middleware, and file-based protocol for integration with other Business systems and applications.

### **6.3 Security / Access Control, Compliance, Administration:**

- Enterprise-grade security, scalability and vendor support
- Granular, Role-Based Access Control (RBAC): Defining permissions, down to the field level based on user roles (e.g., Indent Holder can only see their customers; Designer can only access design files for assigned jobs, business users, administrators, audit users etc.)
- The proposed ERP solution should support integration with On-prem Microsoft Active Directory via LDAP over TLS protocol.
- The user account management module in the proposed ERP solution should provide robust security features, including the enforcement of complex password policies (covering minimum and maximum length, complexity, history, aging, reuse restrictions, and account lockout thresholds) as well as support for multi-factor authentication (MFA).
- The proposed ERP solution should be compatible with major Web Application Firewalls.
- The proposed ERP solution shall support secure integration interfaces employing strong authentication mechanisms, including mutual TLS, digital certificates, or token-based authentication, and shall not use hardcoded credentials. All data exchanged between the ERP system and internal or external systems shall be encrypted in transit using Transport Layer Security (TLS) version 1.2 or higher.

- Data Encryption & Sovereignty: All data must be encrypted in transit (TLS 1.2+) and at rest. The solution must comply with PSPC's data residency and sovereignty requirements and should support employing digital signatures wherever required.
- The proposed ERP system should be developed at ASVS level 2 or **equivalent** and Vendor should certify that its system satisfies the same.
- The vendor should provide timelines for provision of security patch/update against critical, high, medium and low level of security vulnerabilities.
- The vendor should provide security assurance that its product has undergone comprehensive security testing including penetration testing.
- The vendor should support the customer for deployment and configurations of standard security controls on the OS ~~ERP~~-system including EDR agent, logs collector agent, file integrity monitoring agent, operational monitoring agent and any other agent where required.
- Comprehensive Audit Trail: Should be able to activate audit trail / log on any data including but not limited to every user login, data field change, document view and system action, and complete activity logging providing a complete history for compliance and internal audits.
- The vendor should have a well-defined and documented policy for addressing security vulnerabilities in the ERP software.
- Segregation of Duties (SoD): Implement and monitor SoD rules to prevent fraud and error
- Inherent validations and controls across modules
- Where applicable two factor authentication (TFA)
- Regular Patch Management functionality
- Online Realtime and offline Replication, Backup and Recovery

## **7 Proposed Project Approach, Methodology & Timeline**

### **7.1 Company Profile**

- Supplier should demonstrate company stable history and financial stability:
  - Supplier itself or parent / associated company should be in the business for last 5 years, preferably 3 years in the relevant business
  - Should have minimum on average Rs 500Mn annual turnover for last 3 consecutive years
  - Prior experience of implementing the proposed ERP in manufacturing is mandatory. Experience with paper/printing industry , will have preference

### **7.2 Methodology:**

- Suppliers must use the ERP Activate methodology, detailing activities for each phase: Explore, Prepare, Realize, Deploy, Run
- Supplier should clearly mention the standard implementation methodology that will be adopted during the complete implementation process

### **7.3 Project Governance**

- The Supplier will assign senior representative(s) (whose profile will be shared with Procuring Agency in advance for its concurrence) each from its own firm as well as from the Principal who will be required to attend the Project Steering Committee meetings on invitation.
- The supplier will be required to engage expert resources from the OEM or Parent organization without any additional cost to Procuring Agency whenever required during the entire period of contract for successful implementation and support in resolving issues.

#### **➤ Project Manager**

- The Supplier will depute a Project Manager who shall supervise/ steer the project and ensure its successful implementation and operations as per the technical specifications and project timelines. The project manager and his team shall be dedicatedly available on-site (whenever required by the Procuring Agency) and involved from the time of signing of contract up to the Operational Acceptance.
- Supplier's Project Manager and project team should work in close coordination with procuring agency's team
- The Project Manager will provide Project Charter, milestones and deadlines for the implementation of the ERP. A detailed schedule covering Implementation (Technical, Functional and Architectural), Installation, Interfaces, Performance testing, Acceptance testing, Training and delivery including a graphical representation of task duration and interdependencies (e.g., a GANTT or PERT chart) will be part of the project Charter.
- The Supplier will provide the Project charter including 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 detailed requirements of Project Manager and Project team are given in Annexure-D.

#### 7.4 Association with OEM:

- Supplier should be direct minimum Silver or similar level partner / Solution implementor with the OEM of the offered ERP
- The Supplier shall engage and register OEM Support at the backend as SLA requirements.

#### 7.5 Functionality Availability Acknowledgement

- Supplier should clearly state against each functionality one of the following:
  - **Inherent Functionality:** Required functionality is available as inherent part of ERP
  - **Need Customization:** Required functionality needs customization of ERP
  - **Need Personalization:** ERP personalization / customization within the given framework of OEM
  - **Support Solution:** It can be supported through other 3 party or already vendor developed application that will be seamlessly interfaced with ERP. Already have a proven record in similar environment
  - **Not Available:** Cannot be done
- Inherent functionality of the ERP is preferred option

#### 7.6 Fact / Data Sheet for Future Prospect Requirement

- Supplier should submit details as mentioned in the section 4.2 with regards to Future Prospect Modules

#### 7.7 Supplier Assumptions / Expectations

- Supplier should clearly state all assumptions / expectation from PSPC before and during implementation and after go-live to avoid any misunderstandings / surprises that can affect the overall project cost / timelines

#### 7.8 Training Plan

The objective of the training program is to prepare the PSPC staff to get ready in order to run the operations, the administration, the support and maintenance of the Systems. The training will be conducted by applying a “Train the trainers” concept. The full training cycle will be delivered onsite by Supplier trainers and engineers. This training is intended for the PSPC and for the trainers selected by the PSPC. The Supplier will provide to PSPC the requirements regarding the competence of future trainers. The trainers, after passing the complete set of courses and being certified by Supplier, will be able to provide in future the training to the PSPC’ staff.

All the Technical Trainings shall be OEM (or OEM’s Authorized Training partners) based and for Allied System Components from their experts.

A detailed Training Plan will be defined jointly with the PSPC. The Supplier and the PSPC shall mutually agree on the exact details of 40 working training days’ distribution in total, included into the proposal, being 30 working days for the functional training in two batches, 10 working days for the technical training, It will include the standard training courses.

The Training Plan shall be incorporated into the detailed Project Plan.

PSPC shall provide training classrooms, video projectors, and PC workstations for the audience as requested. PSPC must make sure of trainees' attendance in these sessions according to the agreed schedule.

All training courses are supplied with soft copy of materials, described scenarios and hands-on exercises.

The materials describe in detail, with informative screenshots, the processes of configuration of the components, the slides of messages processing by the system, and detailed chapters on "How to...", showing steps of using the system components involved in the document flow.

These materials also contain a summary of the training courses.

Each training course during a session is accompanied with practical work, according to developed scenarios of work.

## **7.9 Services or Project Deliverables Change Control Process (Change Management)**

When either party wishes to request a change to the Services or Project Deliverables, it shall prepare and submit a **Change Request**. When a Change request is raised, Supplier shall detail the additional work required to incorporate the change, together with an assessment of any implications or impacts to the project, and outline costs (if applicable).

Changes are classified into 3 groups:

Type 0: implies the change has no impact on the cost or duration of the project and thus can be approved at the Project Management level.

Type 1: implies impact on either cost or duration of the project but does not require core application development and as such may be approved by the Project Steering Committee. Additional commercial fees shall be charged by Supplier for the change request on top of the original contract fees.

Type 2: implies impact on the cost and/or duration of the project AND will also require core application code change and as such will need to be approved by the Project Steering Committee, and subsequently referred and approved by OEM Product management. OEM Product management may decline the requested change and, instead, suggest a suitable workaround or an alternative solution based on the best practices and lessons learnt from the other implementations across the globe. Additional commercial fees shall be charged by Supplier for the change request on top of the original contract fees.

## **7.10 Contentious Implementation Project Issues Resolution**

In the event that implementation project disputes should arise between the PSPC and Supplier in connection with the Services, the parties shall in good faith seek to address and resolve at the appropriate level of the Project. Therefore, the project dispute should initially be raised at the level of the working teams, and - if they remain unresolved despite the Parties acting in good faith - be escalated through the sequential escalation levels to the Project Managers level, and if required further to the Project Sponsors level. The foregoing shall not be construed in any way to limit or waive the parties' rights to immediately seek dispute resolution pursuant to the contract terms.

## **7.11 Data Migration**

- Supplier will detail the strategy for cleansing, validating and migrating master data and opening balances from existing ERP and other legacy sources.

## **7.12 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 the systems 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 systems will be performed. The end users will verify all the functions of the systems 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 systems will be performed by the Procuring Agency and Supplier will address identified gaps.
- Pre Commissioning Vulnerability scanning for systems will be performed by the Procuring Agency and Supplier will 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 systems. 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 systems 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.

### 7.13 User Acceptance Test

The Procuring agency in coordination with Supplier will prepare cases along with agreed timeline for User Acceptance Test (UAT) for each module. Once the Supplier has completed the setup / configuration for the same, it will inform the concerned users along with Project Manager (Procuring Agency). The users will perform UAT along with suppliers and project manager will communicate the findings to supplier within 5 working days.. Supplier will then advise an appropriate rectification period with mutual consent within 2 working days of receiving of the feedback. In case of non-agreement, the case shall be referred to “Project Steering Committee” and decision of “Project Steering Committee” will be binding on both parties.

The Acceptance certificates will be signed off by the Procuring Agency’s Project Manager.

#### **7.14 Go - Live Operations**

Subsequent to successful completion of UAT, compliance of security observations & vulnerabilities and acceptance of Procuring Agency, the date of Go-Live operations for systems will mutually be decided by Procuring Agency and Supplier.

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 site Go-live testing.

#### **7.15 Operational Acceptance:**

Operational Acceptance means that the offered solution has been installed, configured, integrated and operational as per contract. At least four (04) months of successful operations of the installed equipment & supplies, in accordance with the purchaser requirement will confirm the Operational Acceptance and the purchaser will sign/issue the Operational Acceptance Certificate.

#### **7.16 Infrastructure Design, Deployment and Configuration**

- The Supplier will provide hardware (including servers, active devices, hardware for track & trace e.g. OCR, Cameras etc) OS Licenses, software(s) that are required to implement and support the applications for the entire period of the contract. The cost of which will be part included as part of quote as a separate line item.
- All hardware provided for track & trace should be industrial standard
- In correspondence with BOQ included in the agreement the Supplier will initiate purchasing of hardware and ancillary software at Initial stage of the project.
- The Supplier and Procuring Agency will agree Infrastructure Design Document with final requirements and peculiarities in infrastructure requirements not clarified during bidding process. After the document agreement it will be base for further technical acceptance of the infrastructure.
- Before the Infrastructure Design approval, Procuring Agency shall provide Supplier documents defining hardening measures regarding the operating system, databases.

- Right after Infrastructure document approval, Supplier and Procuring Agency will agree with the check list for Hardware installation verification. This check-list shall be agreed and approved before the installation of Hardware and Ancillary software and shall be used for tests required for the hardware commissioning.
- Procuring Agency will do verification checks in corresponding with the check-list to approve Hardware commissioning certificate.
- 2FA configuration will be done only for software modules accessible over the internet .
- The Supplier will responsible to integrate its solutions with existing IT and Cyber Security infrastructure. All work must be carried out conscientiously and in compliance with OEM (Original Equipment Manufacturer) guidelines and industry best practices. The system will be subject to inspection at various stages, and local regulations/codes must be adhered to at all times. The Supplier must also ensure compliance with all relevant safety standards of the industry as well as prevalent in PSPC.
- All proposed equipment must be current generation, fully supported by the OEM, and not designated as End-of-Life or End-of-Support for the entire contract period. Equipment must be covered by a valid manufacturer warranty and ongoing technical support from OEM for the entire contract period. The supplier will provide the details of Make & Model of all the supplied equipment.

The Supplier will implement the infrastructure setup for new systems with following key features:

- Multi-Tier Segmented Network Design.
- High Available, Fault Tolerant design both at application and database level without requiring any downtime for patching or any other critical update.
- High performance and scalable configurations capable of both horizontal and vertical scaling.
- Disaster Recovery to meet Procuring Agency's RTO (Within 4-Hours) and RPO (Near Zero Data Loss) requirements.
- Compatible with existing Chromium (Microsoft Edge or Google Chrome) web browsers.
- Compatible with CIS compliant latest Red Hat Enterprise Linux (RHEL); or Oracle Enterprise Linux (OEL) operating system.
- Application Dash boarding.

The Supplier will provide and setup required IT Infrastructure (servers, storage, operating system) as per the design agreed with the Procuring Agency.

Sizing and design for the IT Infrastructure should include the transaction volume, projected volume over next five years.

Further, information required by the Supplier to perform the hardware sizing will be provided on request.

### **7.17 Post Implementation Support**

- Supplier should provide 4 months post go-live hyper-care support

### **7.18 Timeline:**

- The proposed project plan should not exceed 18 months from Notification of Award of Contract.

#### **7.18.1 Project Plan**

The Supplier shall submit high-level project plan for the project assuming strict durations for each project stage based on tasks, assumptions and constraints.

#### **7.18.1.1 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 documentation. All artifacts, documents, manuals, catalogues and information furnished by the Supplier shall become the property of the Procuring Agency.

The Supplier will provide (but not limited to) the below mentioned documentation adhering to best practices and industry standards. The supplier will obtain sign-off from the Procuring Agency 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 Procuring Agency 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 for integrations with existing SBP and PSPC systems (if any)
- 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

## **8 Change Management**

### **8.1 Purpose**

The purpose of Change Management is to ensure smooth transition from existing digital environment that includes existing systems and processes to the new top Tier ERP and digital environment. Change has to be structured, controlled and manageable within capabilities and skills of the PSPC employees.

The selected Vendor shall be responsible for designing, executing and monitoring a comprehensive Change Management approach throughout the ERP lifecycle.

### **8.2 Scope of Change Management**

Change Management activities shall cover, but not be limited to:

- Organizational change readiness assessment
- Stakeholder impact analysis
- Communication planning and execution
- User engagement and awareness
- Training and capability building
- Transition support during go-live and hyper care

Change Management shall apply across all ERP modules, business units, locations and user roles impacted by the implementation.

### **8.3 Change Management Approach**

The Vendor shall adopt a **structured change management methodology**

The proposed approach must be:

- Scalable for a large public organization
- Aligned with governance, compliance and audit requirements

Customization of the methodology to suit the Organization's culture and operating environment is expected.

### **8.4 Key Change Management Components**

#### **Change Impact Assessment**

- Identify impacted business processes, roles and user groups (BPR)
- Assess degree of change (high / medium / low impact)
- Document risks related to adoption and resistance

#### **Stakeholder Management**

- Identify internal and external stakeholders
- Define stakeholder influence and engagement strategies
- Establish Change Champions / Super Users network

All communication material shall be reviewed and approved by the Organization.

## **8.5 Training & Capability Development**

The Vendor shall design and deliver a structured training program that includes:

- Role-based training
- Functional and process-oriented training
- Hands-on system training
- Training for end users, super users and administrators
- Training materials (manuals, videos, simulations, job aids)

Training shall be aligned with the final configured ERP solution and delivered prior to go-live.

## **8.6 Change Readiness & Adoption Support**

- Conduct readiness assessments prior to go-live
- Identify adoption risks and mitigation actions
- Support business units during transition
- Work closely with Hypercare and Support teams

## **8.7 Change Management During Go-Live & Hypercare**

The Vendor shall ensure seamless coordination between:

- Change Management team
- Functional implementation team
- Technical team
- Hypercare support team

Specific responsibilities include:

- On-ground or dedicated support for critical user groups
- Rapid response to user concerns and resistance
- Reinforcement of correct system usage and new processes
- Continuous communication during stabilization period

## **8.8 Deliverables**

The Vendor shall provide, at a minimum, the following deliverables:

1. Change Management Strategy and Plan
2. Change Impact Assessment Report
3. Stakeholder & Communication Plan
4. Training Strategy and Training Materials
5. Change Readiness Assessment Reports
6. Adoption Metrics and Progress Reports
7. Final Change Stabilization & Transition Report

All deliverables shall be subject to review and formal acceptance by the Organization.

## **8.9 Compliance & Evaluation**

- Change Management capability and approach shall be evaluated as part of the technical scoring in stage 2
- Vendors must demonstrate prior experience in large-scale ERP change management engagements

## **9 Supplier & Proposal Requirements**

The proposal must include the following sections. Please refer to section \_\_\_\_ for detailed clarifications:

### **Stage 1**

#### **9.1 Executive Summary**

- A 2–3 page summary of the proposal & understanding of the scope of work

#### **9.2 Company Profile**

- Documented evidence of years in business. In case of associated / parent company proof of association is needed
- Provide the last 3 years of audited financial statements
- List of at least last 3 similar successful implementation along with:
  - Brief Project Details
  - Business Name
  - Contact Person Details

#### **9.3 OEM partnership**

- Copy of the association document. Should have a valid period
- The bidder should be Authorized Implementation partner of the OEM. For this purpose, Authorized Letter from the OEM is required
- Recommendation Letter from OEM for this project

#### **9.4 Proposed Solution & Architecture**

- Implementation Methodology
- Functionality Availability Acknowledgement
- Implementation Plan

#### **9.5 Project Team**

- Team profile as indicated in section 7.3
- Expected number of team members at each level

#### **9.6 Project Cost Details**

- Cost should be clearly and separately given for each of the following:
  - ERP One time License Cost. Include breakdown where applicable (user-based / module-based / Application / Database)
  - ERP Annual Support Cost with expected annual increase. Include what will be covered. Use separate page if needed
  - Database one time cost and annual support cost with expected annual increase, if any
  - Any license cost associated with High Availability (HA), Failover (FO), development / UAT / DR instances. Clearly indicate any assumptions in this regard
  - One time Implementation Cost. Optionally Supplier can include justification if desired
  - Supplier annual SLA cost after free 'Post Implementation Hypercare Support' period (refer to Annexure B)
  - Third-Party tool cost. If required with justification

- Hardware Cost
- Any other anticipated costs
- Payment Schedule
- Should proposed phase-wise cost if applicable and benefits PSPC

## 9.7 Timelines

- Supplier should provide detailed timelines phase-wise against major milestones

## 9.8 Risk Management

The purpose of risk management is to minimize the negative risks (threats) and maximize the positive risks (opportunities) identified for the project so that project objectives are met. The following major processes are to be considered as part of risk management:

- Identify Risks - determining which risks might affect the project and documenting their characteristics.
- Analyze Risks – performing a qualitative risk analysis of risks and conditions to prioritize their effects on project objectives and measuring the probability and consequences of risks and estimating their implications for project objectives.
- Plan Risk Response – developing procedures and techniques to enhance opportunities and reduce threats to the project's objectives.
- Monitor and Control Risks – monitoring residual risks, identifying new risks, looking for presence of risk triggers, executing risk reduction plans and evaluating their effectiveness throughout the project life cycle.
- Risk Management Closeout – documenting lessons learned as part of the Project Closeout process, register improvements to risk management process, templates and tools and register improvements to other project processes, templates, and tools to create future leverage/reduce future exposure.

## 9.9 Documentation Management

Each project documentation deliverable will undergo an internal review prior to delivery to PSPC. Upon completion of the internal review, each documentation deliverable will require approval by the Project Manager.

Documents will be subject to the following quality review procedure:

**Draft Release** - A draft document will be made available in advance before Supplier peer review meeting is scheduled.

**Review Meeting** - The peer team will review the draft document. Changes that are mutually agreed between Supplier and at the review meeting will be documented.

**Final Release** - The updated version of the document will be made available to the Supplier project team two days prior to its scheduled delivery date to PSPC. Depending on the document type, either the Supplier Project Manager (for Project Management deliverables) or other Supplier team members are responsible for Supplier sign-off of the documentation deliverable prior to its delivery to PSPC.

### A. Escrow (Core + Customized) Requirements

The custom code after Go-Live will be handed-over to Procuring Agency and will remain intellectual property of Procuring Agency. For the code of Core System components, OEM will be responsible to provide necessary support and coordination for Escrow arrangement when Procuring Agency will enter into any such agreement.

## **Annexure A**

### **Requirement for ERP Customization / Supplier-Developed Solutions**

As indicated earlier that it is highly desirable to fulfill the requirement through core ERP functionality. However, in case the offered ERP does not have or will not be able to fulfill the module requirement, Supplier is allowed to offer ERP Customization or already proven Vendor-Developed solutions, However, it will be the sole discretion of PSPC to accept or reject the same without giving any specific reason.

This annexure details the minimum requirement that the ERP customization / Vendor-Developed Solutions should fulfill.

#### **1. Guidelines**

##### **a. Compliance with ERP Vendor's Allowed Framework**

ERP Customization is allowed but Suppliers must ensure that any custom solution

- Is developed strictly within the OEM approved framework of the offered ERP. Does not violate core code, kernel-level components or unsupported modifications
- Must remain upgrade-safe across future ERP versions

##### **b. Technology Stack Compliance & Sustainability**

Vendor-developed module must:

- Use current, mainstream, and supported technologies that will not reach end of support for entire period of contract including but not limited to:
  - **Backend:** Java, .NET Core, PHP / Python (if appropriate), ABAP (SAP), PL/SQL (Oracle) Frameworks
  - **Frontend:** Angular/React/Vue (optional) or ERP-native UI frameworks
  - **Database:** Oracle / SAP HANA / PostgreSQL/MySQL/MS SQL based on ERP choice
- Demonstrate compatibility with future ERP upgrades

##### **c. Integration Capability**

Vendor-developed modules must:

- Prefer Secure API-based integration (REST, SOAP, Webhook, OData)
- Support secure exchange via:
  - HTTPS/TLS 1.2+
  - OAuth2, JWT, SAML where appropriate
  - Secure PKI/certificate-based communication
- Support hybrid options (batch, file-based, messaging queues) where required
- Provide proven interoperability with offered ERP

#### **d. Security Requirements**

Vendor-developed modules must adhere to:

- OWASP
- ISO 27001 security principles
- ERP-native authentication and authorization frameworks
- Support for audit trails, logging, user security and role-based access
- No hard-coded credentials
- Secure session management

#### **e. Proven Interoperability & Track Record**

Vendor-developed module must have:

- Minimum 3 successful implementations with the offered ERP
- Reference clients with contact details
- Evidence of performance stability and scalability

#### **f. Maintainability, Flexibility & Upgrade-Safety**

Solution must demonstrate:

- Ease of parameterization/configuration
- Clean layering and modular design
- Low technical debt
- Upgrade-safe architecture aligned with ERP lifecycle
- Ability to adapt to regulatory/organizational changes

#### **g. Licensing, Ownership and Documentation**

- All licenses purchased must be in the name of the organization
- Supplier must provide:
  - Technical design documents
  - Source code & its documentation
  - Admin/user manuals
- Ownership and IP terms must be clearly indicated
- The Supplier should clearly and formally preempt Procuring Agency for any additional OEM license cost that may occur because of any changes, modifications and personalization with regards to application and / or database before executing such activity. The same also applies to temporary or permanent use of any unlicensed functionality

## **2. Information Vendor Must Submit with Bid**

For ERP Customization / Vendor-Developed Modules, Vendor is required to submit the following:

**a. Detailed Technical Architecture**

- Technology stack
- Third-party dependencies

**b. Compliance Statement**

- Confirmation that customization follows the ERP vendor's approved framework

**c. Security Compliance Evidence**

- OWASP/ISO mappings
- Vulnerability assessment samples (if available)

**d. Integration Design**

- Secure API/Web-service architecture
- Supported protocols (REST/SOAP/OData/Webhook)
- Security mechanism (OAuth2/JWT/etc.)

**e. Upgrade and Patch Impact Analysis**

- Statement showing how module behaves across ERP upgrades
- Strategy for future compatibility

**f. Reference Implementations**

- Similar deployments with offered ERP
- Contact details

**g. Detailed BOM & Licensing Structure**

- Clear list of required HW/SW
- License ownership details

**h. Implementation Methodology**

- SDLC model
- DevOps pipeline (CI/CD, automated testing, etc., if applicable)

**i. Support Model & SLA**

- Response/resolution commitments
- Resource skill profiles
- Support Continuity

## ***Annexure B***

### Service Level Agreement

The Implementor (“Service Provider”) will be responsible for the **end-to-end technical and functional management** of the ERP environment deployed **on-premises**, ensuring uninterrupted business operations, optimal performance, security compliance and continuous improvement.

The Supplier will be engaged for 5 years terms, after expiration of ‘Post Implementation Hypercare Support’ period. The contract may be extended further in mutually agreed terms and conditions.

This annexure details PSPC expectation of the scope of work and SLA terms. Supplier can propose their own terms and conditions in addition to minimum requirement as described in this annexure, with proper justification on how and why the same will be more effective. Such proposals, with appropriate justification, will carry more weight provided all other terms remain same.

#### **1. Scope of Managed Services**

##### **a. ERP Functional Management**

The Service Provider shall manage the complete ERP application stack, including but not limited to:

- All ERP modules implemented during the project
- All customizations, vendor-developed components, extensions (developed within permitted ERP framework)
- Integration interfaces (APIs, web services, middleware)
- Workflow and approval configurations
- Concurrent programs / batch jobs / background jobs
- Functional Support for user queries & resolution of issues
- Trainings and assistance to PSPC IT team for support of ERP

##### **b. Report Development**

- Manage all standard, customized and vendor developed reports
- Develop new reports as per agreed user requirement. All developing framework should follow the guidelines provided in Annexure A
- Guidance & Assistance to PSPC IT team in developing and supporting reports

##### **c. Technical & Infrastructure Management**

- Application server administration
- Database administration (Oracle Database / SAP HANA / SQL Server)
- Middleware administration (where applicable)
- OS-level administration support (limited to ERP-impacting activities)
- Patch deployment, kernel updates, bundle patches, legal patches
- Backup policy adherence, restore tests, refresh support

- Any component malfunctioned during the contract period will be replaced without any additional cost to the purchaser. Parts or any component identified non-genuine, copy or refurbished during contract period, will be rejected instantly and it will be supplier's responsibility to replace that whole or component at supplier cost.
- OEM Advance parts Replacement of the entire solution – AHR / RMA Claim with Next Business Day delivery to SBP premises.
- Technical Support (preferably On-Site) or otherwise over e-mail/phone/web whenever required by the purchaser.

#### **d. Security & Compliance Management**

- Periodic user access reviews
- Role-based access control (RBAC) maintenance
- Patch implementation for critical security vulnerabilities
- Audit log monitoring and reporting
- Compliance with organization's IT Security Policy
- Compliance with industry standards:
- OWASP
- The supplier shall be the responsible to fix all Cyber Security issues / vulnerabilities as and when identified by the purchaser during Contract period. The critical and high vulnerabilities will be fixed within seven working days, whereas medium and low can be fixed within thirty days

#### **e. Incident, Problem & Change Management**

- Incident logging and resolution
- Root cause analysis for repeated or high-impact issues
- Change Request (CR) implementation following the organization's CAB process
- Emergency change protocol
- Release management and version management

#### **f. Performance Management**

- Continuous application performance monitoring
- Tuning of ERP, database, integrations and infrastructure
- Monthly performance baseline review
- SLA-driven optimization suggestions

#### **g. End-User Support Services**

- Helpdesk operations
- Knowledge transfer to internal teams
- Support for new business requirements (within agreed CR mechanism)

## **2. Service Level**

All service levels apply **during business hours (08:00–18:00)** unless otherwise noted.

**a. Incident Categories & Response/Resolution Times**

<i>Severity</i>	<i>Description</i>	<i>Response Time</i>	<i>Resolution Time</i>
Critical (P1)	Complete system downtime, major business process failure affecting all users	30 minutes	4 Hours
High (P2)	Major functionality degradation affecting multiple users with no workaround	1 Hour	8 Business Hours
Medium (P3)	Functionality impacted with a workaround; business impact limited	4 Hours	3 Business Days
Low (P4)	Non-critical issue; cosmetic or minor impact	1 Business Day	7 Business Days

**b. Preventive Maintenance**

<i>Activity</i>	<i>Description</i>	<i>Frequency</i>
Database Health Check	Tablespace, redo logs, archive logs, index health, fragmentation	Monthly
Backup & Restore Test	Test full restore	Quarterly
ERP Performance Review	Key jobs, Concurrent Programs, workflow	Monthly
Security & Upgrade Patch Review	Apply necessary ERP security and upgrade patches where applicable after testing	Quarterly Review + Security & Upgrade as & when required
User Access Review	Privileged and sensitive access review	Annual
DR Drill	Full Failover Test	Annual

**c. Change Management SLA**

All changes must follow:

- Defined Change Request (CR) submission
- Impact analysis
- User acceptance testing (UAT)
- Formal approval by Change Advisory Board (CAB)

**d. Reporting Requirement**

The Service Provider shall provide the following:

- Incident summary with SLA compliance %

- Root cause analysis of recurring/high-impact incidents
- Patch implementation status
- Performance dashboard
- Security incidents Monthly Reports
  - and audit log summary
  - Utilization report (CPU, memory, database)
- Quarterly Reports
  - System stability analysis
  - Optimization recommendations
  - DR readiness and backup audit
  - Compliance checks (OWASP)
- Annual Report
  - Full health assessment
  - Improvement roadmap
  - Capacity planning forecast

**e. Staffing Requirement**

As Supplier will be the primary support for all matters related to ERP, they will need to facilitate the support staff requirement at minimum as follows:

<b>Role</b>	<b>Description</b>	<b>Profile</b>	<b>Resident / Online</b>	<b>Dedicated / Shared</b>
Functional Consultant cum Coordinator (1)	This role will perform dual responsibilities of acting as the coordinator between PSPC and Supplier for all support communication. Will act as a first line of support / will activate escalation matrix if required. In addition, he/she will be responsible for providing functional support to users / PSPC IT staff	<ul style="list-style-type: none"> <li>- Strong communication skills both verbal &amp; written</li> <li>- Certified Functional Expert with minimum 3 years of relevant experience</li> <li>- Preferably from the implementation team</li> </ul>	Resident 9:00am – 5:30pm Mon-Fri	Dedicated
Functional Support (1)	He/she will be responsible for providing functional support to users / PSPC IT staff	<ul style="list-style-type: none"> <li>- Certified Functional Expert with minimum 3 years of relevant experience</li> <li>- Preferably from the implementation team</li> </ul>	Resident 9:00am – 5:30pm Mon-Fri	Dedicated
ERP Technical Support (1)	For monitoring & maintenance of system performance including Tuning, patching, workflow & concurrent management etc. In addition, he / she will execute Monthly performance baseline review	<ul style="list-style-type: none"> <li>- Certified Technical Expert with minimum 3 years of relevant experience</li> <li>- Preferably from the implementation team</li> </ul>	Online Support with minimum one monthly visit. In addition, he / she will visit if and when required for any incident related matters	Shared

Database Administrator (DBA) (1)	Database administration including performance tuning, space optimization, patching, etc.	<ul style="list-style-type: none"> <li>- Certified DBA with minimum 3 years of relevant experience</li> <li>- Preferably from the implementation team</li> </ul>	<p>Online Support with minimum one monthly visit.</p> <p>In addition, he / she will visit if and when required for any incident related matters</p>	Shared
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Supplier will provide the name and profile of the persons nominated for the above purpose. In case of separation of any of the nominated resource from Supplier organization, it will be the responsibility of Supplier to replace the resource within 2 weeks of unavailability

**f. Escalation Matrix:**

Supplier will provide escalation matrix for response time with the following proposed Trigger Times

<i>Escalate To</i>	<i>Trigger Time</i>
Level 2	1 Hour
Level 3	2 Hours
Level 4 (Senior Level)	3 Hours
Level 5 (Head)	4 Hours

**g. Transition & Knowledge Transfer Requirement**

Though it is expected that Supplier would have provided trainings to the Functional Champions / Superusers & IT staff during the implementation, but the process of Transferring knowledge to the PSPC staff is expected to continue during the SLA period with especial focus on:

- Frequent Occurring Issues with their step-by-step investigation and possible resolution
- Functional / Technical design/ architecture with reference documents
- Customization Repository
- Interface codes (where applicable)

## ***Annexure C***

### Post Go-Live Hyper Care Support Services

#### **1. Purpose of the Annexure**

This annexure defines the **Hypercare Support Services** requirements to be provided by the ERP Implementer immediately following the formal **Go-Live declaration** of the ERP system.

Hypercare support is intended to ensure system stability, business continuity, rapid issue resolution, and user confidence during the initial period of live operations, when the organization may experience increased transaction volumes, user queries, and operational challenges

#### **2. Definition of Hypercare Period**

Hypercare Period refers to the intensive post-implementation support phase commencing from the official Go-Live date. The Hypercare period shall be for a minimum duration of 4 months

#### **3. Objectives of Hypercare**

The key objectives of the Hypercare phase include:

- Stabilization of the ERP system in the live environment
- Rapid resolution of teething issues and post Go-Live defects
- Continuous monitoring of system performance and integrations
- High availability of functional and technical expertise
- Minimization of business disruption
- Knowledge transfer and user handholding

#### **4. Scope of Hypercare Service**

The Supplier shall provide the following services during the Hypercare period:

##### **a. Functional Support**

- Immediate support for business users across all implemented ERP modules
- Clarification and resolution of transaction-level issues
- Validation of end-to-end business processes
- Assistance in period-end / critical operational activities
- Support for master data, transactional data and reporting issues

##### **b. Technical Support**

- Monitoring of application, database and integration components
- Resolution of technical errors, performance issues and system warnings
- Support for middleware, interfaces, APIs and integrations
- Assistance with security roles, authorizations and access-related issues

**c. Integration & Interface Support**

- Monitoring and stabilization of all inbound and outbound interfaces
- Error analysis and resolution for interface failures
- Coordination with third-party system owners if required

**d. User Enablement & Handholding**

- On-site or remote presence of key functional consultants
- User guidance for real-time operational issues
- Assistance in interpreting system behavior and outputs

**5. Hypercare Support Model**

The Supplier shall deploy a dedicated Hypercare team, comprising:

- Hypercare Lead / Manager (1 On-Site)
- Functional consultants (2 On-Site + 1 Remote)
- Technical consultants (1 On-Site + 1 Remote)
- Integration specialists (1 Hybrid)
- The Hypercare team shall comprise of members of implementation team

**6. Service Hours**

Hypercare support shall be provided during:

- Business Hours (i.e. 8am to 5:30am Working days declared by PSPC)
- Extended Hours / Critical Periods: As required during month-end, quarter-end or critical business cycles

**7. Incident Classification & Response Expectations**

The Supplier shall classify and handle issues during Hypercare as follows:

<i>Severity</i>	<i>Description</i>	<i>Response Time</i>	<i>Resolution Time</i>
Critical (P1)	Complete system downtime, major business process failure affecting all users	Immediate	4 Hours Continuous efforts required
High (P2)	Major functionality degradation affecting multiple users with no workaround	Immediate	8 Business Hours Continuous efforts required
Medium (P3)	Functionality impacted with a workaround; business impact limited	Immediate	2 Business Days

Low (P4)	Non-critical issue; cosmetic or minor impact	Immediate	15 Business Days
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Penalties may be applied on reoccurring issues to be mutually agreed terms

## 8. Governance & Communication

- A daily or periodic Hypercare status meeting shall be conducted during the Hypercare period
- The Supplier shall provide:
  - Daily / weekly issue logs
  - Root cause analysis (RCA) for critical issues
  - System stability and performance reports

## 9. Exit Criteria from Hypercare

The Hypercare phase shall be formally closed when:

- No open Critical or High severity issues remain
- System performance is stable
- Business users confirm operational readiness
- Knowledge transfer to steady-state support team is completed
- Formal Hypercare closure sign-off is obtained from the organization

Hypercare period will be extended in case of non-compliance of above exit criteria with no additional cost to procuring agency.

## 10. Transition to Regular SLA-Based Support

Upon completion of Hypercare, the Supplier shall:

- Transition support responsibilities to the agreed post-implementation support model
- Share complete documentation, issue history and lessons learned
- Ensure continuity without disruption

## 11. Organization Responsibilities

- Provide timely access to users and business representatives
- Nominate internal Single Point of Contact for coordination
- Provide required infrastructure access as per security policies

## 12. Evaluation & Compliance

Compliance to this Hypercare Annexure will be:

- Mandatory

- Evaluated as part of the overall bid assessment
- Deviations, if any, must be clearly highlighted by the Supplier in their proposal.

## ***Annexure D***

### ***Project Team***

The Supplier's Project Team should at least include key specialists and should comply with the minimum profile given below. The Supplier will provide the name and profile of the persons nominated. 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.

<b>Role</b>	<b>Responsibility</b>	<b>Profile</b>	<b>Resident / Online</b>	<b>Dedicated / Shared</b>
Project Manager (1)	The Project Manager will oversee planning, coordination and execution of the ERP implementation to ensure it meets scope, time. The role will also ensure successful delivery of change management, testing, training, go-live activities and closure activities.	<ul style="list-style-type: none"> <li>- Strong communication skills both verbal &amp; written</li> <li>- Certified Project Manager preferably PMP, with minimum 8 years of relevant experience in managing ERP and similar implementations</li> </ul>	Full time resident	Dedicated
Functional Specialist with alternates (at least 1 for each module)	The role will be responsible for leading functional implementation in his/her respective areas. The role will also coordinate with end users / PSPC IT staff for aligning and configuring the modules accordingly.	Certified Functional Expert with minimum 3 years of experience in implementation of the proposed ERP.	Full time resident	Dedicated
ERP Technical Support with alternates (1)	The role will be responsible for monitoring & maintenance of system performance including Tuning, configuration, patching, workflow & concurrent management etc.	Certified Technical Expert with minimum 3 years of relevant experience.	On-site/ Online Support with minimum one weekly visit. In addition, the role will be responsible for visiting if and when required for any incident related matters	Shared
Database Administrator (DBA) and Application Administrator with alternates (1)	Database administration including performance tuning, space optimization, patching, etc.	Certified DBA with minimum 3 years of relevant experience.	On-site/ Online Support with minimum one monthly visit. In addition, the role will visit if and when required for any incident related matters	Shared
Developer with alternatives (2)	The role will be responsible for customization/ development where needed.	Relevant certification with minimum 3 years of experience.	Full time resident	Dedicated

Integration Specialist with alternative (1)	The role will be responsible for developing API's / applications for integrating with Track & Trace and other applications.	Minimum 3 years of relevant experience.	On-site/ Online Support	Shared
Security Specialist with alternative (1)	The role will be responsible for managing the security of Application, Database, Servers, Network and Operating Systems.	Certified cyber security expert with minimum 3 years of relevant experience	On-site/ Online Support	Shared
Infrastructure Expert	Responsible for the technical specification and configuration of various components of IT infrastructure.	Technical Expert with minimum 3 years of relevant experience.	On-site/ Online Support	Shared

## **10 Technical Specifications of Track & Trace:**

### **1. Introduction**

The purpose of this document is to define the user -level requirements for a Track and Trace system that enables real-time tracking and status visibility of banknote sheets from the initial paper input to final cutting and packing. This system aims to enhance production transparency, efficiency, banknote paper inventory management and complaint resolution by enabling end-to-end traceability of every banknote.

This document, however focused towards Banknote production will also serve as the conceptual guideline for further products being produced in Other Security Products (OSP) Segment, coupled with the process flows of the respective products. The process flows will be shared in later stages of tender procedure and the supplier will need to prepare the methodology of Project deployment accordingly.

#### **1.1 Scope**

The system needs to be able to track the movement and transformation of sheets through all stages of production using technologies such as QR/barcode, OCR (Optical character recognition) or any other advance technology. The track and trace system must possess the capability to be integrated with the machine's database to collect production as well as machine data for dashboarding use through a middleware or another appropriate technology to connect the various machine databases with the central track and trace system. From Paper store till cutting, finishing and packing of single notes, traceability of every note, sheet and batches is required through all the stages of production process. Based on this track and trace system, a warehouse management module is required for efficient management of all WIPs (Work in progress) and finished products.

#### **1.2 Target Users**

Following are the target users of the Track and Trace System at PSPC:

- PSPC Production Departments
- Quality Control Teams
- ILD (Inventory and logistics department)
- IT and Systems Monitoring Team
- Risk Management and Complaint handling teams.
- Management Team
- Internal Audit (Only having rights to view the data)

### **2. Business Objectives**

Track and Trace System needs be able to fulfill the following objectives of the business:

- Enable real-time tracking of banknote production at the batch, sheet and single note level.
  - Capture critical production events and status changes.
  - Maintain traceability from raw material (paper) to final packed notes via warehouse management module.
  - Improve process transparency and efficiency.
  - Enable complaint tracing down from sheets to individual notes.

### 3. General Requirements

- Ensure compatibility with existing machinery along with scalability option for future addition of machines.
- System must uniquely identify and track each sheet throughout its lifecycle.
- Support barcode/QR code or relevant technology printing and scanning at each critical control point.
- Provide Localized as well as Centralized dashboard for monitoring, alerting, and reporting.
- The track and trace system must possess the capability to be integrated with the machine's database to collect production as well as machine data for dashboarding use through a middleware or another appropriate technology.
- Allow password protected manual override or adjustment option for special cases (e.g., miss-fed/test pile/learning sheets).
- Handle data input from both automatic scanners and manual hand scanners (at different points of production).
- Provide reconciliation of input/output at each machine/process.
- Ensure data security and integrity in a secure production environment.
- Compatibility, integration and uninterrupted interfacing with existing track and trace application at the packaging end and ERP application
- Compliance to all necessary security protocols for execution, communication, data storage and interfacing
- PSpC will perform its own quality check and may suggest recommendations which would need to be incorporated by the bidder

### 4. Understanding of Process

Banknote production is a highly specialized and secure process that involves multiple stages to ensure durability, security, and authenticity of the currency. The main steps involved in producing banknotes are enumerated below:

1. Offset Printing
2. Intaglio Printing
3. Screen Printing
4. Examination
5. Numbering and Varnishing
6. Cutting, Finishing and Packing

Production process starts from the plain cotton-based sheets (or polymer) and ends as single printed notes with every note having unique number on it. PSpC prints different denominations (Rs 10, 20, 50, 100, 500, 1000, 5000) and every denomination has different size of notes and sheets.

## 4.1 Basic Machine Layout

For better understanding of machines being used at PSPC, a reference picture is attached below:

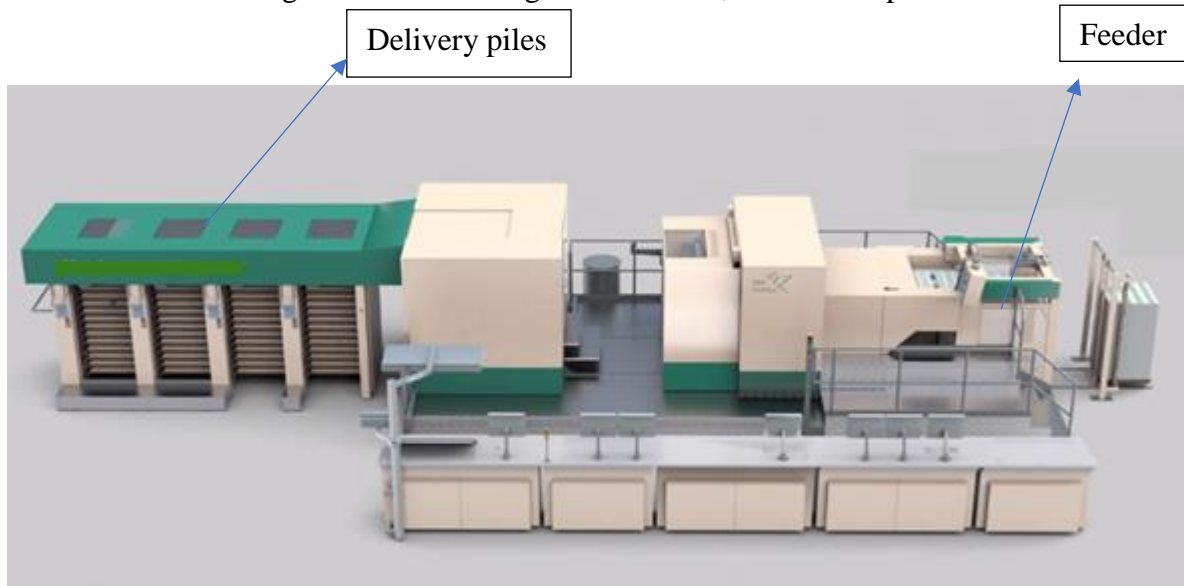


Figure 1

Above

mentioned picture is for reference only, almost all machines being used at PSPC have similar basic structure but they may vary slightly from machine to machine based on the desired operation. In a banknote sheet we have blank white borders available for bar/QR code printing, for reference a picture is attached below but it may vary from original sheet at PSPC.

Exemplary area to Print barcode (for reference only) -currently no barcode is being printed on sheet.

Note 1	Note 2	Note 3	Note 4	Note 5
Note 6	Note 7	Note 8	Note 9	Note 10
Note 11	Note 12	Note 13	Note 14	Note 15
Space Available = 13-15 mm Potential Location for QR/Barcode	Note 17	Note 18	Note 19	Note 20
Note 21	Note 22	Note 23	Note 24	Note 25
Note 26	Note 27	Note 28	Note 29	Note 30
Note 31	Note 32	Note 33	Note 34	Note 35
Note 36	Note 37	Note 38	Note 39	Note 40
Note 41	Note 42	Space Available = 25 mm Note 43	Note 44	Note 45
Note 46	Note 47	Note 48	Note 49	Note 50

Figure 2

white border (for Printing of barcode/QR); it could be on x-axis or y-axis

## 5. Department-wise Functional Requirement:

To better understand the department wise functional requirement, one need to have a brief understanding of process flow of banknote manufacturing in PSPC. Before moving into departmental working, it is important to understand some terms being used in PSPC. There are different types of outputs at delivery piles of machines:

**Good Reams**: Reams with good quality printed sheets.

**Suspected Reams**: Reams which are suspicious of having some full waste sheets, suspected sheets and good sheets.

**suspected Reams**: Reams with sheets having some good notes and some suspected problematic notes.

**Full Waste Reams**: Reams with sheets having all waste notes which will be destroyed at shredding plant.

### Note:

It is important to account for the potential of sheet drops occurring in between the feeder and delivery piles. To ensure the integrity of the track and trace system, it must be capable of detecting such drop events. This can be implemented by integrating sheet drop detection sensors at strategic points within the machine, or any other alternative suitable technologies designed to monitor sheet flow and detect anomalies.

In cases where barcodes or QR codes printed on the sheets are not reliably scannable, it is necessary to include the corresponding human-readable data (i.e., the encoded numeric values) directly beneath or beside the code. This ensures that such documents can be manually entered into the system using manual input device when automated scanning fails.



(For Reference Purpose only)

### 5.1 Paper Store:

Paper store of PSPC receives blank paper from the paper supplier in form of 15 reams per board - a ream is equal to 500 sheets. Paper store issues this paper to offset WIP Room on demand. It is important to keep in mind that different denominations have different physical size of sheets, however they all are supplied in form of reams (500 sheets).

Sr. #	Where to Capture	What to Capture	How to Capture
1.	Paper Store	<ul style="list-style-type: none"> <li>○ Denomination of the ream.</li> <li>○ Date of receiving paper from paper supplier in Paper store.</li> <li>○ Reel number from paper supplier.</li> <li>○ Date of manufacturing of paper.</li> </ul>	QR Code / Bar Code Printer / OCR (Optical Character Recognition) / or any other suitable technology.

WIP Rooms are basically called as Strong rooms connected with every department. Every department (Printing and Finishing) has its own WIP Rooms. Every inward or outward movement of paper is documented, counted and done through WIP Rooms only.

## 5.2 Offset Printing

Offset printing is the first step of printing in banknote production. At this step sheet is passed from machine once and simultaneously both sides of sheet are printed. Outputs of offset machines are either Good sheets, Suspected sheets or some full waste sheets. Offset Printing department has different machines in it.

1. Offset machine I
2. Offset machine II
3. Offset machine III\*
4. Screen Printing machine \*

*\*To be added in next year*

*\*\*Under Procurement phase*

### 5.2.1 In Offset WIP-room:

Here at offset WIP Room crew receives boards of 15 reams each from paper store. On every ream there is data stamped from Paper supplier (Reel no, date of manufacturing, denomination identity). Paper will be delivered to offset machines on demand till then it will be stored in WIP Room in form of board of 20 Reams. Here, Paper inventory management is also required to implement FIFO (First in – First Out) methodology.

Sr. #	Where to Capture	What to Capture	How to Capture
1.	Offset WIP Room	<ul style="list-style-type: none"> <li>○ Denomination of the ream</li> <li>○ Date of receiving paper in offset WIP Room</li> <li>○ Link between reel number and reams (Sheets)</li> <li>○ Paper Inventory Management/Warehouse Management.</li> </ul>	QR Code / Bar Code Printer / OCR (Optical Character Recognition) / or any other suitable technology

### 5.2.2 At Offset Machine:

The paper goes to Offset machines from offset WIP Room on demand. Before setting the paper for printing on the machine, it is required to print a QR/bar code or a unique ID on the border of every sheet as depicted in Figure 2 in section 4.1 either at printing machine or a standalone system at Raw Material Storage area. Alternatively, the Supplier can also consider putting this bar/QR code on sheets at Paper Manufacturing site which is located besides PSPC's premises.

The mechanism needs to be devised by the bidder as to how this printing would be done on every single sheet before being fed into the machine or at the time of printing. The printing mechanism should ensure that there is not double sheet or folded corner sheet being passed on to the next stage. A link between the unprinted ream packing to the sheets is required to be developed here for ensuring end to end traceability.

Sr. #	Where to Capture	What to Capture	How to Capture
1	Offset Feeder	<ul style="list-style-type: none"> <li>○ Denomination</li> <li>○ Sheet ID</li> <li>○ Date of offset printing</li> <li>○ Machine Name on which being fed</li> <li>○ Machine crew (optional)</li> <li>○ Time and date of feeding the paper</li> </ul>	Scanning of the QR Code / Bar Code Scanner / OCR (Optical Character Recognition) / or any other suitable technology
2	Delivery	<ul style="list-style-type: none"> <li>○ Output status of sheet along with its sheet ID (e.g., Good, Suspected, Full Waste)</li> </ul>	Scanning of the QR Code / Bar Code Scanner / OCR (Optical Character Recognition) / or any other suitable technology; The system also needs to capture the information about quality of the sheet divided into three categories, (good, suspected, full waste). This may be achieved through installation of any suitable sensor at each pile.
3	Delivery	<ul style="list-style-type: none"> <li>○ Lot / Batch Identity.</li> <li>○ Warehouse Management for printed paper storage in WIP Room.</li> </ul>	

Currently, the existing machines (Offset Machine I & II) are not equipped with an inline inspection system. As a result, the classification of sheets as good, suspected, or full waste is manually performed by the machine operator along with the Quality Control representative. To address this, bidder is required to provide a standalone sheet scanning setup. This system would not only track and update the status of each sheet (Good/Suspected/Full Waste) but also keep a count of sheets in each category. At present, the counting is carried out using a separate standalone counting machine.

### 5.3 Intaglio Department

Good and suspected offset sheets move to the intaglio printing department (Front Intaglio Printing and Back Intaglio Printing). Intaglio department has four machines dedicated for banknote printing and we can print front or back intaglio on either of machines.

1. Intaglio Machine 1
2. Intaglio Machine 2
3. Intaglio Machine 3
4. Intaglio Machine 4
5. Intaglio Machine 5

Here at intaglio department, sheets are printed one by one per side (at first back printing then front side printing).

**5.3.1 Intaglio Back Printing:**

After the back-side printing, sheets are categorized into 3 different categories by inspection system of machine:

1. **Good Back Intaglio Sheets**
2. **Suspected Back Intaglio Sheets**
3. **Full waste sheets /torn sheets** (Full waste/torn sheets will not be printed further and will move to shredding plant for disposal).

Sr. #	Where to capture	What to capture	How to capture
1	Intaglio Feeder	<ul style="list-style-type: none"> <li>○ Denomination</li> <li>○ Sheet ID</li> <li>○ Date/time of intaglio printing</li> <li>○ Machine name</li> <li>○ Machine crew (optional)</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology
2	Delivery Piles	<ul style="list-style-type: none"> <li>○ Output status of sheet (Good/Suspected/waste)</li> </ul>	<p>QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology.</p> <p>The system also needs to capture the information about quality of the sheet divided into three categories, (good, suspected, full waste). This may be achieved through installation of any suitable sensor at each pile.</p>
3	Delivery	<ul style="list-style-type: none"> <li>○ Lot / Batch Identity.</li> <li>○ Warehouse Management for printed paper storage and movement in WIP Room.</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology

Up to this point database will have following information:

*(Manufacturer’s Reel no. --- Offset Printing — Offset declared Good/Suspected --- Intaglio Machine - --- Intaglio Back Good/Suspected)*

**Note:** *If any sheet is dropped within machine, then track trace system should immediately identify that X no of sheets scanned at feeder but X -n sheets reached at delivery (YY number of sheets are missing).*

### 5.3.2 Front Intaglio Printing:

The good and Suspected-back intaglio sheets move to the front side printing process, where they are again categorized into:

1. **Good Front Intaglio Sheets**
2. **Suspected Front Intaglio Sheets**
3. **Full waste sheets /torn sheets.**

Similarly, at this point QR/bar code scanner would be needed at feeder and for delivery piles to update status of sheets based on output.

Sr. #	Where to capture	What to capture	How to capture
1	Intaglio Feeder	<ul style="list-style-type: none"> <li>○ Denomination of sheet</li> <li>○ Sheet ID</li> <li>○ Date/time of intaglio printing</li> <li>○ Machine name</li> <li>○ Machine Crew (Optional)</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology
2	Delivery Piles	<ul style="list-style-type: none"> <li>○ Output status of sheet (Good, Suspected, Full waste sheets)</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology. The system also needs to capture the information about quality of the sheet divided into three categories, (good, suspected, full waste). This may be achieved through installation of any suitable sensor at each pile.
3	Delivery	<ul style="list-style-type: none"> <li>○ Lot / Batch Identity in form of reams.</li> <li>○ Warehouse Management for printed paper storage/movement to and from WIP Room.</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology

Up to this point database will have following information:

*(Manufacturer's Reel no . --- Offset Printing — Offset declared Good/Suspected --- Intaglio Machine  
---- Intaglio Back Good/Suspected ---- Intaglio Front Good/Suspected)*

## 5.4 At Screen Printing

Either before or after Intaglio printing, higher denomination will move to screen printing machine (physically placed at Offset department), whereas lower denominations move to sheet examination department. Here, screen-printing machine will again segregate the sheets between good and suspected screen-printed sheets.

Sr. #	Where to capture	What to capture	How to capture
1	Feeder	<ul style="list-style-type: none"> <li>○ Denomination of the sheet</li> <li>○ ID of the sheet</li> <li>○ Date of screen printing,</li> <li>○ Machine crew (optional)</li> <li>○ Time/date</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology
2	Delivery Piles	<ul style="list-style-type: none"> <li>○ Output status of sheet (Good, Suspected, full waste)</li> <li>○ Lot / Batch Identity in form of reams.</li> <li>○ Inventory/warehouse Management for paper storage/movement to and from WIP Room.</li> </ul>	<p>The system also needs to capture the information about quality of the sheet divided into four categories, (good, suspected, full waste and suspected sheets). This may be achieved through installation of any suitable sensor at each pile.</p> <p>QR Code / Bar Code Printer / OCR (Optical Character Recognition) / or any other suitable technology</p>

After Printing (offset, intaglio & screen printing) is completed, finishing stage starts. Finishing Department has 3 major Sections:

- **Sheet Examination**
- **Numbering & Varnishing**
- **Cutting, Finishing & Packing**

## 5.5 Sheet Examination

Before moving into sheet examination there is a segregation:

- Good and Suspected Intaglio sheets of higher denomination whose intaglio (Back and Front)/screen printing is complete, will move to (Numbering + Inspection + Varnishing) machine in Numbering and Varnishing department. Whereas, Full Waste sheets will move to shredding plant.
- Lower Denomination will go to Sheet Examination (Sheet Inspection Machine and Manual Examiners).

**5.5.1** Bar coded Intaglio printed (Good and suspected) sheets of lower denomination will be processed at Sheet Inspection machine (SIM). SIM will segregate the sheets in different categories:

- **Examined Good Sheets**
- **Suspected Sheets.**
- **Full waste /torn sheets**

Sr. #	Where to capture	What to capture	How to capture
1.	Sheet Inspection machine Feeder	<ul style="list-style-type: none"> <li>○ Denomination of sheet</li> <li>○ Sheet ID</li> <li>○ Date/time of SIM processing</li> <li>○ Machine crew (optional)</li> <li>○ Date/time</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology
2.	Delivery Piles	<ul style="list-style-type: none"> <li>○ Output status of sheet (Good, suspected, Full waste sheets)</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/sensors or any other technology. The system also needs to capture the information about quality of the sheet divided into four categories, (good, suspected and full waste ). This may be achieved through installation of any suitable sensor at each pile.
3.	Delivery	<ul style="list-style-type: none"> <li>○ Lot / Batch Identity in form of reams.</li> <li>○ Inventory Management for paper storage/movement to and from WIP Room</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/sensor or any other technology

4.	Manual examiner desks	○ Examiner ID	To be recorded by manual entry
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Examined Good sheets will move to next step (Numbering and Varnishing department). Whereas, Suspected sheets will now be sent to Manual Examiners. These examiners will re-examine the material to further segregate the output into categories which are;

- **RT Good** (Which will be considered as good after slight reworking)
- **Full waste sheets** (Which are completely bad)
- **Suspected Sheets** (Sheets on which some notes are doubted to have a problem)

**For Re Touching Good Reams:**

Up to this point database will have following information:

*(Manufacturer’s Reel no. --- Offset Printing — Offset declared Good/suspected --- Intaglio Machine - --- Intaglio back Good/suspected ---- Intaglio Front Good/suspected --- screen printing good / suspected --- Sheet Inspection Machine (SIM) ---- SIM Suspected----- Manual Examiner RT Good)*

**For Full Waste Sheets /Torn sheets:**

Up to this point database will have following information:

*(Manufacturer’s Reel no. --- Offset Printing — Offset declared Good/suspected --- Intaglio Machine - --- Intaglio back Good/suspected ---- Intaglio Front Good/suspected--- Sheet Inspection Machine (SIM)---- SIM suspected----- Manual Examiner Full waste ---- Shredding plant)*

**For Suspected Sheets:**

Up to this point database will have following information:

*(Manufacturer’s Reel no. --- Offset Printing — Offset declared Good/suspected --- Intaglio Machine - --- Intaglio back Good/suspected ---- Intaglio Front Good/suspected --- Sheet Inspection Machine (SIM)---- SIM Marked (PS))*

All marked suspected sheet will now move to Cutting, finishing and Packing department to be processed at Suspected sheet processing machine for due numbering of notes.

After all the processing at Sheet Examination department paper (Only Good Declared) will move to Numbering and Varnishing section.

**Note:**

*As, in next step sheets will be cut down in form of notes and margins where barcode/QR code was printed is not intact so here it is challenge to track/trace sheet and all numbered note. The bidder needs to devise a method to link the sheet number with the note numbers through a technology solution*

## 5.6 Numbering and Varnishing Department (N & V):

In Numbering and Varnishing department, every note in sheet will get a unique identity in form of number (e.g., XXX 0000000).

At this stage, we need to map sheet ID (In form of bar/QR code) with individual note numbers so that every individual note on a single sheet shall be linked against respective sheet number. Number of notes per sheet may be 40 / 50 / 60 depending on the denomination.

Here, we can use OCR (Optical character recognition), Image Capturing or any other relevant technology to extract note numbers and its relevant sheet number.

Sr. #	Where to capture	What to capture	How to capture
1	Feeder	<ul style="list-style-type: none"> <li>○ Denomination</li> <li>○ Sheet ID</li> <li>○ Date/time of N&amp;V processing</li> <li>○ Machine name</li> <li>○ Machine crew (optional)</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology
2	Machine Area (Between numbering unit and varnishing unit)	<ul style="list-style-type: none"> <li>○ Banknotes numbers against individual sheet number (In terms of bar code)</li> <li>○ Connection between sheet and note numbers on the sheet.</li> </ul>	OCR (Optically character recognition) or any other relevant technology
3	Delivery Piles	<ul style="list-style-type: none"> <li>○ Output status of sheet Good, Suspected, full waste sheets</li> <li>○ Inventory Management for paper storage/movement to and from WIP Room.</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology

There are 2 different input lines for Numbering and Varnishing department:

1. Direct Good/Suspected sheet from Intaglio (Higher Denominations)
2. Examined Good Declared sheet from Sheet Examination department.

### 5.6.1 Direct Good/Suspected stuff from Intaglio/Screen Printing

Reams (Good + Suspected) of higher denomination come directly to (Numbering + Inspection + Varnishing) machine. Here sheets will be examined via installed inspection system and at output we will have 3 different outputs.

- 1.1 Good sheets (Numbered Varnished sheet)
- 1.2 Suspected sheets (Un numbered)
- 1.3 Torn/ full waste

### **5.6.1.1 Good Numbered and Varnished Sheets**

These sheets will be sent directly to CF&P department for cutting and packing,

Till this point tracking information will be as follow:

*(Manufacturer's Reel no. --- Offset Printing — Offset declared Good/Suspected --- Intaglio Machine -  
--- Intaglio Back Good/Suspected ---- Intaglio Front Good/Suspected (Higher denomination) --- NIV -  
-- NIV Good Numbered)*

### **5.6.1.2 Suspected sheets (Un Numbered)**

These suspected sheets will be sent back to Sheet Examination department (Manual Examiners) to retrieve RT Good and Suspected (SS).

Till this point tracking information will be as follow:

*(Manufacturer's Reel no. --- Offset Printing — Offset declared Good/Suspected --- Intaglio Machine -  
--- Intaglio Back Good/Suspected ---- Intaglio Front Good/suspected (Higher denomination) --- NIV -  
--- NIV Suspected -----Manual Examiner RT Good /SS)*

### **5.6.1.3 Torn/Full waste sheets:**

A separate hand scanner would be required for those sheets as quantum of torn/full waste sheets is low and now this sheet will now be sent to shredding plant.

## **5.6.2 Examined Stuff from Sheet Examination department.**

Examined good sheets from sheet examination department comes directly to N & V dept. machines.

### **5.6.2.1 Good Numbered sheets**

Good Numbered sheets are placed in form of board of 20 reams and move to CF&P department (Unomatic or Cut pack -III machine)

### **5.6.2.2 Full Waste sheets:**

These full waste sheets will not move to next step and will directly go to shredding plant for destruction. So, a scanner would be required at shredding plant to track trace the destruction of sheets which were declared full waste at timing of printing and finishing.

## 5.7 Cutting, Finishing and Packing:

Cutting, finishing and Packing (CF&P) department is final stage of finishing. Here sheets are cut down into single note form and packed in form of packets and bundles. CF&P department has 2 different inputs and two outputs.

*Note: Please be aware that currently a separate track and trace project is under execution at this stage in which only bundles and respective packaging boxes are to be marked with barcode and the traceability will be until formed bundles. Hence, the system proposed by the Supplier must be able to integrate with existing system.*

### 5.7.1 Good numbered sheets (Ready to cut and pack)

These sheets can be processed at sheet to bundle conversion machine. Each bundle is then shrink wrapped and packed in boxes in a particular sequence.

### 5.7.2 Suspected sheet (to be segregated, numbered and packed)

These sheets can be processed only on the suspected sheet processes machine. Here, sheets are cut down in form of single notes on a separate paper cutting machine and then fed to machine for numbering and bundle formation.

Sr. #	Where to capture	What to capture	How to capture
1.	Before Feeder	<ul style="list-style-type: none"> <li>○ Denomination</li> <li>○ Ream number</li> <li>○ Record of sheets</li> <li>○ Connection between note and sheet</li> <li>○ Machine name</li> <li>○ Crew name (optional)</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology
2.	At delivery	<ul style="list-style-type: none"> <li>○ Bundle numbers pertaining to a single ream.</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology
3.	Delivery	<ul style="list-style-type: none"> <li>○ Lot / Batch Identity in form of bundles.</li> </ul>	QR/Bar Code scanner/OCR Optical Character Recognition/or any other technology

At CF& P department, we need clear connection that which note belongs to which ream/sheet and its complete production history keeping in mind that reconciliation of sheets fed and output in form of notes remains intact.

## **5.8 Shredding Plant:**

Track and trace system deployment will also be required at shredding plant before being shredded to reconcile the sheets that have been marked as full waste and have been received at shredding plant.

## 6 Non-Functional Requirements

Category	Requirement Description
<b>Security</b>	Only authorized users can access, update, or override data. Role Based Access
<b>Performance</b>	Real-time data monitoring at all stages.
<b>Scalability</b>	Modular to support batch-level tracking and tendency to be expanded to future machines
<b>Reliability</b>	Fault-tolerant data capturing and reconciliation.
<b>Integration</b>	Compatible with existing PSPC machines.
<b>User Interface</b>	At each workstation as well as Centralized dashboard with customizable reports, filters, and search capabilities.
<b>Maintainability</b>	Support for system updates, new machine onboarding, and configuration.
<b>Flexibility</b>	The application and all hardware should be flexible enough to accommodate any changes in number of levels of packing, pack size, barcode rationale change etc. Provision should be available at front end for users to change the same (with effective date) option

## 7 Special Requirements and Challenges

### **Duplicate Scanning:**

System should allow for re-scanning of sheets (e.g., after misfeed or drop).

### **Manual Input:**

Must accommodate manual overrides (e.g., RT Good, marked reams).

### **Sheet Reconciliation:**

System must highlight discrepancies in sheet counts.

### **Cutting Phase Challenge:**

Develop strategy to trace bundles after cutting, once barcodes are destroyed.

- Supplier should separately quote, application, hardware and support costs.
- Supplier should clearly mention the yearly support cost after post go-live support ends and lock annual increase for the same for next 2 years.
- The Supplier shall ensure that no damage occurs to existing machines or infrastructure during the installation of the QR/barcoding system.
- The Supplier must provide detailed system and network documentation (including architecture diagrams, configuration details, and operating manuals) as part of the handover process.
- Barcode Software Dashboard, Reporting, and Analytics System.
- The Supplier shall design and implement a dedicated real time dashboard accessible to project stakeholders, RBAC based on role/privilege/category.
- Application must have the provision to be integrated with other application including ERP etc. as per the requirement of PSPC.

- Below are some indicative dashboard requirements to display from QR/Bar coding system and Oracle BI;

Dashboard	
1	Real-time Denomination-wise status of Sheets/Notes at different stages of manufacturing
2	Real-Time efficiency and productivity of machines and units
3	Consolidated reports shift /batch/day/month wise pertaining to production
4	Real-time strong-room-wise, Denomination-wise status sheets in terms of reams / batch
5	Real-time Machine-wise status of currency notes printing
6	Real-time Denomination-wise status of currency notes printing
7	The system should support role-based reporting and export features (Excel, PDF, CSV) and offline analysis.
8	The system should be able to exchange data in a globally accepted data exchange mode with ERP and MES system.

#### 11 **Flexibility for Suppliers/ bidders:**

1. Mechanism for linking note numbers with sheet barcodes post-cutting.
2. Optimal scanning solutions for full waste handling.
3. OCR/vision systems for high-speed and accurate note number capturing and creating a link between sheet and note numbers.
4. Solutions for ream and bundle-level QR/Bar code generation and hierarchy.
5. Supplier must propose contingency/alternative procedure in case if printed barcode is not scannable at station due to misprint or poor quality of printed barcode.
6. Supplier may propose system based on different methodologies and functionalities which are usually utilized in such deployments, and may use different hardware technology i.e., Sensors/Barcode Scanner/Scan Bar or any equivalent technology. However, final selection of technology will solely be the discretionary right of the user.
7. Supplier shall provide complete hardware and software details as well as system installation and deployment methodology.
8. Keeping in view the future development as well as ongoing project of track and trace at packaging stage, Supplier shall thoroughly consider the potential ways to integrate data warehouses of all systems and the subsequent management.

**SECTION VI: STANDARD FORMS**

**A. STANDARD FORMS FOR**

**(Two Stage Bidding Procedure)**

## **Table of Forms**

<b>Sr. No.</b>	<b>Form No.</b>	<b>Description</b>	<b>Proposal Part</b>
1	Form T1	Letter of Bid – Technical Proposal	Technical Proposal
2	Form T2	Bidder Information Form & JV Partner Information	Technical Proposal
3	Form T3	Bidder’s Eligibility / Qualification Criteria	Technical Proposal
4	Form T4	Affidavit for Bidder’s Blacklisting Status	Technical Proposal
5	Form T5	Declaration for Ultimate Beneficial Owners Information	Technical Proposal
6	Form T6	Manufacturer’s Authorization Form	Technical Proposal
7	Form T7	Code of Conduct	Technical Proposal
8	Form F1	Letter of Bid – Financial Proposal	Financial Proposal
9	Form F2	Form of Bid Security	Financial Proposal
10	Form F3	Price Schedule	Financial Proposal
11	Form F4	Non-Disclosure Agreement (NDA)	Financial Proposal

# TECHNICAL PROPOSAL FORMS

## Form T1 – Letter of Bid (Technical Proposal)

*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.*

*Note: All italicized text in black font is to help Bidders in preparing this form and Bidders shall delete it from the final document.*

**Date of this Bid submission:**

**ITB No.:**

**Title of Procurement:**

**To: Pakistan Security Printing Corporation (Pvt.) Ltd**

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 Equipment:
- (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 Security:** 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 our Purchase Order 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.

**Form T2 – Bidder Information Form (A)**

*[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.]*

ITB No: \_\_\_\_\_  
Title: \_\_\_\_\_  
Bidder: [Manager] \_\_\_\_\_

1. Bidder's Name <i>[insert Bidder's legal name]</i>
2. Bidder's actual or intended country of registration: <i>[insert actual or intended country of registration]</i>
3. Bidder's year of registration: <i>[insert Bidder's year of registration]</i>
4. Bidder's Address in country of registration: <i>[insert Bidder's legal address in country of registration]</i>
5. Bidder's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
6. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above. <input type="checkbox"/> 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.

**Form T2: Bidder's JV Members Information Form (B)**

*[The Bidder shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Bidder and for each member of a Joint Venture]].*

Date: *[insert date (as day, month and year) of Bid submission]*

RFB No.: *[insert number of RFB process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

Page \_\_\_\_\_ of \_\_\_\_\_ pages

1. Bidder's Name: <i>[insert Bidder's legal name]</i>
2. Bidder's JV Member's name: <i>[insert JV's Member legal name]</i>
3. Bidder's JV Member's country of registration: <i>[insert JV's Member country of registration]</i>
4. Bidder's JV Member's year of registration: <i>[insert JV's Member year of registration]</i>
5. Bidder's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i>
6. Bidder's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITB 4.4.
8. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

### Form T3 – Bidder’s Eligibility / Qualification Criteria

*[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.]*

ITB No: RFP No. LP/T-4081/25  
 Title: Supply, Installation, Implementation, Maintenance and Technical Support of Enterprise Resource Planning (ERP) and Track & Trace Solution .  
 Bidder: \_\_\_\_\_

#	Eligibility / Qualification Criteria	Means of Verifications	Reference in Bid**	Bidder’s Assessment (Y/N)
a.	Bidder must have Legal existence as entity of >= 5 years. In case of JV / Consortium each party should have existence of >= 5 years and are registered / legally authorized to operate in Pakistan	Registration / Incorporation certificate		
b.	Bidder must have Registered office and operational presence in Pakistan.	Must Submit the Detail of Offices Available in Pakistan		
c.	Bidder must be registered with Income Tax and Sales Tax Departments and must appear on Active Taxpayer List of FBR Pakistan	Attach copy of valid GST certificate and reference of Active Taxpayer list of FBR.		
d.	Bidders should not be under a declaration of ineligibility for corrupt and fraudulent practices issued by any Government (Federal, Provincial), a local and international body or a public sector organization.	Undertaking on N.J stamp paper		
e.	Bidder and their deputed staff must submit an undertaking to comply with PSPC’s Code of Conduct, using the prescribed format provided in the tender document.	Undertaking on the provided format		
f.	Bidder must submit an undertaking to comply with all applicable HSE laws, regulations and industry standards; and with all HSE requirements of PSPC, using the prescribed format provided in the tender document	Undertaking on the provided format		
g.	Bidder must accept of PSPC NDA and Confidentiality requirements at the time of pre-bid meeting	Submission of Undertaking on non-judicial stamp paper as per the		

		format attached with the tender document.		
h.	Bidder Must not be in litigation with PSPC and PPRA and not have been blacklisted or be in breach of performance with PSPC and any Organization(s)"	An affidavit (on non-judicial stamp paper) to the effect that the bidder has never been black-listed by any previous client and PSPC and has never indulged in corrupt, fraudulent or collusive practice for Procuring Contracts.		
i.	Bidder must have minimum average annual turnover (independent or consolidated) of PKR 500 million in last three years	Audited Financial Statements.		
j.	Bidder should be Authorized Implementation Partner (for ERP Vendor).	Must be at least Silver (Direct) authorized agent of OEM / Principals for participation in the RFP. Valid Authorization Certificate must be submitted.		
k.	Bidder should submit Letter of Authorization /Recommendation for Participation from OEM for this project	Supplier should submit 'Recommendation' from the local office of the OEM in Pakistan or Regional office in case of unavailability of local Pakistan Office		
l.	Bidder must have deployed at least 3 projects of ERP implementation (Independently or in consortium) in last 7 years	Must enclose Job Completion letters / certificates from the client mentioning the scope of work/modules implemented by bidder. PSPC may verify from the issuer.		
m.	Bidder must have deployed at least 2 projects of track and trace (Independently or in consortium) in last 7 years	Must enclose Job Completion letters / certificates from the client mentioning the scope of work/modules implemented by bidder. PSPC may verify from the issuer.		
n.	Bidder must have deployed at least 2 projects of ERP implementation and 1 project of track and trace in Manufacturing Industry (Independently or in consortium) that fetch data directly from machines with real time reporting capability in last 7 years	Must enclose Job Completion letters / certificates from the client mentioning the scope of work/modules implemented by bidder. PSPC may verify from the issuer.		
o.	In case of JV or Consortium the bidder must submit the documents as mentioned in clause 3.1 of Bid Data Sheet (BDS)	Submission of: i. Agreement clearly stating the assignments to be performed by each party ii. Undertaking by both parties that PA will not be affected in case of any litigation or arbitration		

		<p>proceedings.</p> <p>iii. Nomination of mutually agreed Project Manager by both parties.</p> <p>iv. Undertaking mentioning that both the parties shall be severally and jointly responsible for fulfilling their obligations for this assignment and ensuring the completion of all deliverables.</p>		
p.	Proposed ERP / Support Solutions should be hosted 'On-Prem'. Cloud solutions will automatically disqualify / technology in all aspects should not have an 'End of Support' announced in next five years	Letter from OEM and or should be verifiable from the OEM website		
q.	Bidder must nominate a Project Director supported by at least One Experienced Functional Representative from OEM having 10 years' experience for participation in periodic ERP steering meetings.	Bidder must provide undertaking		
r.	Bidder must depute Project Team having Profiles that comply with requirements mentioned in Annexure - D	Bidder must provide undertaking		
s.	Bidder must provide post Go-Live Hyper Care Support for a minimum duration of 4 months as per requirements mentioned at Annexure C.	Bidder must provide undertaking		
t.	Any customization / vendor developed solution must comply with Annexure A - Requirement for ERP Customization / Vendor-Developed Solutions	Bidder must provide undertaking		
u.	Synchronization of data capturing with machine speeds of printing. (min. 8000 SPH)	Bidder must provide undertaking		
v.	Technology of both ERP and Track & Trace should support interaction with data capturing devices like OCR reader, barcode reader, etc.	Bidder must provide undertaking		
w.	Seamless integration synchronization with built-in scanners / IoT / cameras and other machine equipment of PSPC.	Bidder must provide undertaking		

x.	Post Implementation SLA must comply with Annexure B - ERP Managed Services & Service Level Agreement	Bidder must provide undertaking		
y.	The proposed ERP/ Custom Application should integrate with On-Prem Active Directory	Bidder must provide undertaking		
z.	Proposed ERP should have a deployment of an instance with 500 users in Pakistan	Undertaking on OEMs Letter Head		
aa.	OEM of Proposed ERP should have over 100,000 customers around the globe	Undertaking on OEMs Letter Head		

Seal & Signature of Bidder:	_____
Date:	_____

**Annex-1****Experience of Similar Assignment (Applicable)**

#	Assignment / Product Description	Company / Name of Customer	Contact Person Name / Contact Details
1.			
2.			
3.			
4.			
5.			

Please attach copies of work/Purchase orders, contract or customer reference letter/email or any other reference document that can substantially prove the above.

**Details of Trained/Experienced Resources (Applicable)**

#	Resource Name	Certificate Details	Certificate Issuance Date
1.			
2.			
3.			
4.			

**Office Address**

#	Company Name	Complete Office Address	Office Numbers
1.			
2.			
3.			

**Form T4 – Affidavit for Bidder’s Blacklisting Status**

ITB No: \_\_\_\_\_  
Title: \_\_\_\_\_  
Bidder: \_\_\_\_\_

**[Required on non-judicial stamp paper; value of Rs. 100 stamp paper should be as per required value as per Stamp Duty Act]**

To:

Deputy General Manager (Purchase)  
Purchase Department  
Pakistan Security Printing Corporation (Pvt.) Ltd  
Jinnah Avenue, Malir Halt,  
Karachi –Pakistan

**Affidavit for Bidder’s Blacklisting Status**

Dear Sir,

I/We hereby confirm and declare that I/We, [Manager], 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.

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.

Seal & Signature of Bidder:	_____
Date:	_____

**Form T5 - Declaration for Ultimate Beneficial Owners Information**

ITB No: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Bidder: \_\_\_\_\_

**Declaration of Ultimate Beneficial Owners Information for Public Procurement Contracts**

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 intermediary companies, 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 of Persons/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 person or arrangement

9. Information about the Board of Directors (details shall be provided regarding number of shares 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 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)
<b>Total number of shares taken (in figures and words)</b>							

10. Any other information incidental to or relevant to Beneficial Owner(s).

Name & signature

(Person authorized to issue notice on behalf of the company)

Seal & Signature of Bidder:	
Date:	

**Form T6 – Manufacturer’s Authorization Form**

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its Bid, if so indicated in the **BDS.**]*

Invitation No: \_\_\_\_\_  
Title: \_\_\_\_\_  
Bidder: \_\_\_\_\_

To: *[Pakistan Security Printing Corporation  
(Pvt.) Ltd]*

WHERE  
AS

We [ \_\_\_\_\_ ], who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer’s factories]*, do hereby authorize *[insert complete name of Bidder]* to submit a Bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the Goods]*, and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: [ \_\_\_\_\_ ]

Name: [ \_\_\_\_\_ ]

Title:  
[ \_\_\_\_\_ ]

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ *[insert date of signing]*

## **Form T7 – Code of Conduct & Undertaking**

### ***Objective***

This Code of Conduct aims to establish PSPC's business and employment practices on the highest standards of ethical behavior, integrity, accountability, courage and excellence.

It also aims to ensure that all concerned adhere to PSPC's defined core values, act with prudence, protect the interests of PSPC and maintain a positive work environment.

### ***Scope***

This Code of Conduct is applicable on all PSPC Employees, Contract Employees, Trainees, Apprentices, Deputationist, Outsourced Workforce, and other stakeholders.

### ***General Behavior***

The ethical principles of the Corporation prevail over the concerned individual's personal origins, beliefs, values, opinions, preferences, or habits at all times. All concerned, while they are in PSPC's service, shall strictly adhere to the following rules of General Behavior at all times which include, but are not limited to, the following responsibilities:

- 3.1. Comply with all applicable laws, including, but not limited to, those pertaining to general employment, anti-fraud, corruption, bribery, anti-discrimination, anti-harassment, health, safety and environmental protection.
- 3.2. Conduct themselves honestly and carry out their duties diligently and impartially to the best of their abilities, in compliance with the applicable rules, regulations, policies and procedures, as defined by PSPC from time to time.
- 3.3. Maintain highest standards of ethics and professionalism and devote their working activities to the service of PSPC.
- 3.4. Not guarantee or promise employment of any type to anyone for any length of time.
- 3.5. Assist and advise colleagues and show openness and transparency in all dealings with them.
- 3.6. Do not withhold information from concerned colleagues that may affect the conduct of business, particularly in order to gain a personal advantage. Providing false, inaccurate or exaggerated information, refusing to cooperate with colleagues or demonstrating any form of obstructive behavior is strictly not allowed.
- 3.7. Not indulge in any activity during off duty hours that directly or indirectly undermines the provisions of this Code, other PSPC rules, policies and procedures, or brings disrepute to PSPC.

3.8. Refrain from indulging in any illegal and unlawful activity including but not restricted to substance abuse and consumption of alcohol, drugs or any kind of intoxicant(s), as well as, any sort of gambling/betting activities, etc.

3.9. Officers of PSPC performing supervisory functions/roles on behalf of PSPC shall take every possible care to act within the delegated authority as provided by any law, rules or regulations under which such officers may purport to act.

### ***Fraud, Embezzlement & Misrepresentation***

4.1. All concerned shall not commit, or assist any activity that involves making false statements, fraud, forgery, misappropriation, theft, embezzlement, bribery, misrepresentation, violation of PSPC rules and regulations, policies and procedures or any similar activity that harms, or may harm the interest and reputation of PSPC.

4.2. Be honest in conveying professional conclusions, opinions, research and findings for whatever purpose and shall not manipulate the system for personal gains.

4.3. Refrain from indulging in any illegal and unlawful activity.

4.4. Abstain from any false or intentionally misleading information and declarations, bogus documents, and submit false or misleading claims with wrong information.

### ***Discrimination and Harassment***

5.1. All concerned shall treat all internal and external stakeholders with respect, fairness and courtesy and avoid all such forms of behavior that create or may create an atmosphere of harassment, hostility, intimidation and discrimination of any kind, especially involving age, gender, health, ancestry, physical disability, race, religion, length of service, political beliefs, marital status or family structure.

5.2. Shall not propagate in any manner whatsoever sectarianism, ethnic / regional hatred / animosity and take part in sectarian, ethnic, linguistic or parochial activities, as well as partiality or favoritism on these bases, indulge in nepotism, victimization, willful abuse of power, and unwarranted negative criticism and gossip about other employees.

5.3. Avoid creating / sending / forwarding electronic or any other form of communication that contains statements or material, which is discriminatory, offensive, defamatory, illegal or constituting harassment.

5.4. Refrain from engaging in any form of inappropriate relationship with persons with whom they have a professional relationship.

### ***Confidentiality***

6.1. All concerned shall maintain strict confidentiality of PSPC and its constituents affairs and shall not communicate directly or indirectly to their colleague(s) or (ex) employee(s) belonging to other department(s) or profession or to the press or public, any document or information which has come into their possession in the course of their official duties, or has been prepared or collected by them in the course of their duties, whether from official sources or otherwise, unless compelled to do so by judicial or other authority or unless instructed to do so by a superior officer in the discharge of his / her duties.

This confidentiality must be maintained by the employee even after the cessation of their employment with PSPC.

6.2. All concerned shall not give any evidence, document, or any information before a public committee without the prior approval of the Competent Authority.

6.3. Interaction or communication directly or indirectly on behalf of PSPC with foreign governments, media, and missions in Pakistan without seeking clearance from the competent authority is not permissible.

### ***Use of PSPC Assets and Resources***

7.1. All concerned are required to use PSPC assets such as properties, office equipment, supplies etc. for PSPC's business purposes and not for gain or benefit of persons or entities other than PSPC, including self.

7.2. Material information such as information contained in any file, document, note, report, letter, fax, USB, email, instrument, etc. held by the concerned must be used solely for the purpose of PSPC business and returned to PSPC upon cessation of employment / contract agreement.

7.3. Official information, documents, reports, proposals, research papers, software, etc. developed using PSPC time and resources constitute PSPC's intellectual property. All concerned will neither have the right to claim these as their own, nor shall they use/exploit the same for personal gain or benefit of persons or entities other than PSPC during or beyond cessation of their employment with PSPC.

### ***Political Affiliation***

8.1. No employee of PSPC shall take part in or subscribe in aid of or assist in any way, any political activity / movement in Pakistan or relating to the affairs of Pakistan, or take part in, or in any way assist, any movement or activity, which is, or tends directly or indirectly to be, subversive to Government as by law established in Pakistan or detrimental to the ideology or integrity of Pakistan.

8.2. Employees shall not canvass or otherwise interfere with or use their influence in connection with or take part in any election to a legislative body, whether in Pakistan or elsewhere, provided that an employee who is qualified to vote at such election may exercise their right to

vote; but if he/she does so, he/she shall give no indication of the manner in which he/she proposes to vote or has voted.

### ***Attendance and Punctuality***

9.1. All concerned shall not leave the office or absent himself / herself from duty, without prior permission of the Competent Authority.

9.2. Strictly adhere to defined break timings, as defined by PSPC from time to time.

### ***Conflict of Interest***

10.1. All concerned are required to recognize and disclose activities that might give rise to conflicts of interest or the perception of conflicts and to ensure that such conflicts are properly managed or avoided. All disclosure should be made at the time the conflict arises, or when it is recognized that a conflict may be perceived, in writing to the supervisor. If the supervisor also has an interest in the matter, the disclosure shall be made to the next higher level of authority.

10.2. While an officer is serving in PSPC, their spouse, children and siblings will henceforth not be eligible for recruitment in PSPC, SBP and/or any of its other subsidiaries.

### ***Gifts and Entertainment***

11.1. Except as permitted, employees shall neither receive nor give any gift(s) or favor(s), in cash or any kind, from / to any organization, including those stakeholders (individual, entities or person created by law) who are in contact with PSPC.

11.2. The above instructions will not be applicable in case;

- a. A gift received for value of up to Rs 10,000 provided aggregate value of gifts received / given from / to during a fiscal year from same source does not exceed Rs 20,000;
- b. Advertising materials including trade discounts that an individual or entity normally offers to its general customers;

11.3. The intended recipient will politely refuse the offer of gifts valuing above. However, where such refusal may impact the official relationships, the gift so received would be immediately, but not later than 72 hours, surrendered to HR.

### ***Prohibitions***

12.1. Smoking or other use of tobacco products (including, but not limited to, cigarettes, pipes, cigars, electronic Cig, snuff, or chewing tobacco) is not permitted within the office premises. Employees may smoke outside in open air, at the designated areas, without compromising on the working hours.

12.2. Use of any sort of drug including Pan, Gutka, Naswar, etc. within the office premises is not allowed.

### ***Self-Disclosure of Criminal Conviction***

All employees are required to self-disclose any criminal offence for which any investigating agency have taken cognizance and for which a conviction has been decided against such an employee by any court of law while being professionally engaged with PSPC irrespective of the nature of engagement.

### ***Health & Safety***

All employees must take measures to promote safe working practices, and follow the instructions given by the Health, Safety, and Environment Team from time to time.

### ***Whistleblowing***

All concerned are responsible to immediately report any alleged ethical misconduct or fraud. The employees may raise their concerns through a written report or email at [whistleblower@pspc.gov.pk](mailto:whistleblower@pspc.gov.pk). For more information on the applicability of this policy, refer to Whistleblowing Policy.

### ***Compliance with the rules of conduct***

#### **Role of line managers**

16.1.1. Line managers shall take the necessary measures to encourage respect for the rules of conduct within the entities for which they are responsible.

16.1.2. Managers should ensure that employees placed under their authority are aware of this code.

16.1.3. Apart from the vigilance, line managers are expected to behave in an exemplary manner as regards respect for the principles and rules set out in this code.

16.2. Any information pertaining to violation of this Code must immediately be reported to Director Human Resources.

16.3. If Director Human Resources is found to be violating this Code, MD may be reported. In case of violation by MD, Chairman PSPC may be reported.

### ***Reporting Confidentially***

17.1. All stakeholders when reporting to Director HR shall be deemed to have made such report in strict confidence.

17.2. Human Resource Department shall not disclose the identity of concerned employee to other parties unless it is in the interest of the Corporation or it is required by law.

### ***Consequences of Violating the Code***

18.1. Any employee who violates the Code shall be subject to disciplinary action.

18.2. Failure to report deviations of the Code by all concerned may result in disciplinary action. Similarly, failure to report deviations of the Code by other stakeholders may result in the termination of their relationship with the Corporation.

### ***Interpretation***

This policy shall supersede all previous policies on the subject. In case of any ambiguity in understanding this Policy, the interpretation of the Managing Director will be treated as final. Any exception to the policy shall be approved by the Managing Director on the recommendation of Director HR and shall be reported to Board Human Resource Committee for ratification.

## Undertaking for Compliance with Code of Conduct

**Bidder Name:** \_\_\_\_\_

**Bidder Representative (If any):** \_\_\_\_\_

**Date:** \_\_\_\_\_

I, the undersigned, on behalf of [Bidder Company Name], hereby acknowledge that I have received, read, and understood the Code of Conduct established by [Procuring Agency Name].

As a bidder participating in the procurement process, I undertake to:

1. Adhere to the highest standards of integrity and professionalism in all interactions with PSPC
2. Ensure that all communications and representations made during the bidding process are truthful and transparent.
3. Comply with all applicable laws, regulations, and policies outlined in the Code of Conduct.
4. Avoid any conflicts of interest and disclose any potential conflicts promptly.
5. Report any unethical behavior or violations of the Code of Conduct to the appropriate authorities within PSPC.

I understand that any breach of this undertaking or the Code of Conduct may result in disqualification from the bidding process and potential legal consequences.

**Authorized Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Form FIN**  
**Financial Situation and Performance**

*[The following table shall be filled in for the Bidder and for each member of a Joint Venture]*

Bidder's Name: *[insert full name]*  
Date: *[insert day, month, year]*  
Joint Venture Member Name: *[insert full name]*  
RFB No. and title: *[insert RFB number and title]*  
Page *[insert page number]* of *[insert total number]* pages

**1. Financial data**

<b>Type of Financial information in (currency)</b>	<b>Historic information for previous <i>[insert number]</i> years, <i>[insert in words]</i> (amount in currency, currency, exchange rate, )</b>				
	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, Sub-factor 3.1. The financial statements shall:

- (a) reflect the financial situation of the Bidder or in case of JV member, 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 *[number]* years required above; and complying with the requirements.

**Average Annual Turnover (Annual Sales Value)**

*[The following table shall be filled in for the Bidder and for each member of a Joint Venture]*

Bidder's Name: *[insert full name]*

Date: *[insert day, month, year]*

Joint Venture Member Name: *[insert full name]*

RFB No. and title: *[insert RFB number and title]*

Page *[insert page number]* of *[insert total number]* pages

<b>Annual turnover data</b>			
<b>Year</b>	<b>Currency</b>	<b>Exchange rate</b>	<b>PKR equivalent</b>
<i>[indicate calendar year]</i>	<i>[indicate currency]</i>		
		Average Annual Turnover *	

\* Total PKR equivalent for all years divided by the total number of years.

## Price Schedule Forms

*[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]*

Preamble:

Procuring agency should highlight any special requirements of the Information System and Contract in a Preamble to the Price Schedules. The following is an example of one such preamble;

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
  - iv. *[ insert: **any other Schedules as appropriate ]***
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 or currencies indicated under each respective item. As specified in ITB Clause 15.1 (ITB Clause 28.1 in the two-stage SBD), no more than three foreign currencies may be used. The price of an item should be unique regardless of installation site.

### 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.*

				Unit Prices / Rates			Total Prices		
				Supplied Locally	Supplied from Abroad		Supplied Locally	Supplied from Abroad	
Component No.	Component Description	Country of Origin Code	Quantity	[ insert: local currency ]	[ insert: local currency ]	[ insert: foreign currency A ]	[ insert: local currency ]	[ insert: local currency ]	[ insert: foreign currency A ]
Subtotals (to [ insert: <b>line item</b> ] of Supply and Installation Cost Summary Table)									

**Note:** - - indicates not applicable.

Name of Bidder:	
Authorized Signature of Bidder:	

**Recurrent Cost Sub-Table [insert: identifying number]**

**The detailed components and quantities in the Sub-Table below for the line item specified above, modifying the sample components and sample table entries as needed. Repeat the Sub-Table as needed to cover each and every line item in the Recurrent Cost Summary Table that requires elaboration. Costs MUST reflect prices and rates quoted in accordance with ITB Clauses 14 and 15.**

		Maximum all-inclusive costs (for costs in [ insert: <b>currency</b> ])						
Component No.	Component	Y1	Y2	Y3	Y4	...	Yn	Sub-total for [ insert: <b>currency</b> ]
	Annual Subtotals:							--
Cumulative Subtotal (to [ insert: <b>currency</b> ] entry for [ insert: <b>line item</b> ] in the Recurrent Cost Summary Table)								

Name of Bidder:	
Authorized Signature of Bidder:	

Note: The cost for maintenance must be quoted after expiry of the warranty period e.g. if a component is having three year warranty than the price charged for such maintenance shall be applicable after expiry of the warranty period.

**Grand Summary Cost Table**

		<i>[ insert: <b>Local Currency</b> ] Price</i>	<i>[ insert: <b>Foreign Currency</b> Price</i>
1. Supply and Installation Costs			
2. Recurrent Costs			
3.	Grand Totals (to Bid Submission Form)		

Name of Bidder:	
Authorized Signature of Bidder:	

### Manufacturer's Authorization

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its Bid, if so indicated in the **BDS**.]*

Date: *[insert date (as day, month and year) of Bid submission]*

No.: *[insert number of bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[insert complete name of Procuring Agency]*

#### WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of product]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* (hereinafter, the "Bidder") to submit a bid and subsequently negotiate and sign a Contract with you for resale of the following Products produced by us: We hereby extend our full guarantee and warranty in accordance with Clause 29 of the General Conditions of Contract, with respect to the Therapeutic Goods offered 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]*



### General Information Form

All individual firms and each partner of a Joint Venture 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).

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.			



## Form of Bid Security

*[The bank shall fill in this Bank Guarantee Form in accordance with the instructions indicated.]*  
*[Guarantor letterhead or SWIFT identifier code]*

**Beneficiary:** *[Procuring Agency to insert its name and address]*

**No.:** *[Procuring Agency to insert reference number for the Request for Bids]*

**Alternative No.:** *[Insert identification No if this is a Bid for an alternative]*

**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]*

We have been informed that \_\_\_\_\_ *[insert name of the Bidder, which in the case of a joint venture shall be the name of the joint venture (whether legally constituted or prospective) or the names of all members thereof]* (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its Bid (hereinafter called "the Bid") for the execution of \_\_\_\_\_ under Request for Bids No. \_\_\_\_\_ ("the RFB").

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 agreement signed by the Applicant and the performance security issued to the Beneficiary in relation to such Contract agreement; 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)]*

***Note: All italicized text is for use in preparing this form and shall be deleted from the final product.***

**Form of Bid-Securing Declaration**

*[The Bidder shall fill in this Form in accordance with the instructions indicated.]*

Date: *[date (as day, month and year)]*

No.: *[number of bidding process]*

Alternative No.: *[insert identification No if this is a Bid for an alternative]*

To: *[complete name of Procuring Agency]*

We, the undersigned, declare that:

We understand that, according to your conditions, Bids must be supported by a Bid-Securing Declaration.

We accept that we will be blacklisted and henceforth cross debarred for participating in respective category of public procurement proceedings for a period of (not more than) six months, if fail to abide with a bid securing declaration, however without indulging in corrupt and fraudulent practices, if we are in breach of our obligation(s) under the Bid conditions, because we:

- (a) have withdrawn our Bid during the period of Bid validity specified in the Letter of Bid; or
- (b) having been notified of the acceptance of our Bid by the Procuring Agency during the period of Bid validity, (i) fail or refuse to sign the Contract; or (ii) fail or refuse to furnish the Performance Security (or guarantee), if required, in accordance with the ITB.

We understand this Bid Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of (i) our receipt of your notification to us of the name of the successful Bidder; or (ii) twenty-eight days after the expiration of our Bid.

Name of the Bidder\* \_\_\_\_\_

Name of the person duly authorized to sign the Bid on behalf of the Bidder\*\* \_\_\_\_\_

Title of the person signing the Bid \_\_\_\_\_

Signature of the person named above \_\_\_\_\_

Date signed \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_

\*: In the case of the Bid submitted by joint venture specify the name of the Joint Venture as Bidder

\*\*.: Person signing the Bid shall have the power of attorney given by the Bidder attached to the Bid

*[Note: In case of a Joint Venture, the Bid-Securing Declaration must be in the name of all members to the Joint Venture that submits the Bid.]*

**Letter of Acceptance**

*[Letter head paper of the Procuring Agency]*

*[date]*

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

**SECTION VII: GENERAL CONDITIONS OF THE CONTRACT**

## GENERAL CONDITIONS OF THE CONTRACT (GCC)

1.	<b>Definitions</b>	1.1	The following words and expressions shall have the meanings hereby assigned to them:
		a)	<b>“Authority”</b> means Public Procurement Regulatory Authority.
		b)	The <b>“Arbitrator”</b> 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 <b>GCC Clause 45</b> hereunder.
		c)	The <b>“Contract”</b> 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 <b>“Commencement Date”</b> is the date when the Supplier shall commence execution of the contract as specified in the <b>SCC</b> .
		e)	<b>“Completion”</b> means the fulfillment of the related services by the Supplier in accordance with the terms and conditions set forth in the contract.
		f)	<b>“Country of Origin”</b> means the countries and territories eligible under the PPRA Rules 2004 and its corresponding Regulations as further elaborated in the <b>SCC</b> .
		g)	The <b>“Contract Price”</b> is the price stated in the Letter of Acceptance and thereafter as adjusted in accordance with the provisions of the Contract.
		h)	<b>“Effective Contract date”</b> is the date shown in the Certificate of Contract Commencement issued by the Procuring Agency upon fulfillment of the conditions precedent stipulated in <b>GCC Clause 5</b> .
		i)	<b>“Procuring Agency”</b> means the person named as Procuring Agency in the <b>SCC</b> and the legal successors in title to this person, procuring the Goods and related service, as named in <b>SCC</b> .
		j)	<b>“Related Services”</b> 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)	<b>“GCC”</b> means the General Conditions of Contract contained in this section.
		l)	<b>“Intended Delivery Date”</b> is the date on which it is intended that the Supplier shall effect delivery as specified in the <b>SCC</b> .
		m)	<b>“Information System,”</b> also called <b>“the System,”</b> 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)	<b>“SCC”</b> means the Special Conditions of Contract.
		o)	<b>“Supplier”</b> 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 Agreement, and includes the legal successors or permitted assigns of the supplier and shall be named in the <b>SCC</b> .
		p)	<b>“Project Name”</b> means the name of the project stated in <b>SCC</b> .
		q)	<b>“Day”</b> means calendar day.
		r)	<b>“Eligible Country”</b> means the countries and territories eligible for participation in accordance with the policies of the Federal Government.
		s)	<b>“End User”</b> means the organization(s) where the goods will be used, as named in the <b>SCC</b> .
		t)	<b>“Origin”</b> 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)	<b>“Force Majeure”</b> 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, <b>“Force Majeure”</b> 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)	<b>“Specification”</b> 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.
<b>2.</b>	<b>Application and interpretation</b>	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:  (1) Form of Contract, (2) Special Conditions of Contract, (3) General Conditions of Contract, (4) Letter of Acceptance, (5) Certificate of Contract Commencement (6) Specifications (7) Contractor's Bid, and (8) Any other document listed in the Special Conditions of Contract as forming part of the Contract.

3.	<b>Conditions Precedent</b>	3.1	<p>Having signed the Contract, it shall come into effect on the date on which the following conditions have been satisfied: -</p> <p>a) Submission of performance Security (or guarantee) in the form specified in the <b>SCC</b>;</p> <p>b) Furnishing of Advance Payment Unconditional Guarantee.</p>
		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.	<b>Governing Language</b>	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 <b>SCC</b> . Subject to <b>GCC Clause 3.1</b> , the version of the Contract written in the specified language shall govern its interpretation.
5.	<b>Applicable Law and Effectiveness of the contract</b>	5.1	The contract shall be governed and interpreted in accordance with the laws of Pakistan, unless otherwise specified in <b>SCC</b> .
		5.2	The Contract shall be effective from the date specified in the SCC,
6.	<b>Country of Origin</b>	6.1	The origin of goods and services making information systems may be distinct from the nationality of the Supplier.
7.	<b>Scope of the Information System</b>	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
<b>8.</b>	<b>Supplier's Responsibilities</b>	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.
<b>9.</b>	<b>Procuring Agency's Responsibility</b>	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.
<b>10.</b>	<b>Prices</b>	10.1	The contract price shall be as specified in the Contract Agreement 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.
<b>11.</b>	<b>Payment</b>	11.1	The method and conditions of payment to be made to the Supplier under this Contract shall be specified in <b>SCC</b> .

		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 <b>SCC</b> .
		11.4	The currency or currencies in which payment is made to the Supplier under this Contract shall be specified in <b>SCC</b> 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 <b>SCC</b> pursuant to <b>GCC Clause 11.4</b>
<b>12. Performance Guarantee</b>		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 <b>SCC</b> .
<b>13. Taxes and Duties</b>		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.	<b>Copy Rights</b>	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
		14.5	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.
		14.6	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 <b>specified in the SCC and in accordance with the SCC</b>

15.	<b>Software License Agreements</b>	15.1	<p>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.</p> <p>Such license to access and use the Software shall:</p> <p>(a) be:</p> <p>(i) nonexclusive;</p>
			<p>(ii) fully paid up and irrevocable (except that it shall terminate if the Contract terminates under GCC Clauses 41;</p> <p>(iii) valid throughout the territory of the Procuring agency's Country (or such other territory as specified in the SCC); and</p> <p>(iv) subject to additional restrictions (if any) as specified in the SCC.</p>
			<p>b) permit the Software to be:</p> <p>(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;</p> <p>(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;</p> <p>(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;</p>

			<p>(iv) reproduced for safekeeping or backup purposes;</p> <p>(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;</p> <p>(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</p>
			<p>(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.</p>
		15.2	The Standard Software may be subject to audit by the Supplier, in accordance with the terms <b>specified in the SCC</b> , to verify compliance with the above license agreements.
<b>16. Confidential Information</b>		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	<p>Notwithstanding GCC Clauses 16.1 and 16.2:</p> <ul style="list-style-type: none"> <li>(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</li> <li>(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,</li> </ul> <p>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.</p>
	16.4	<p>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.</p>
	16.5	<p>The obligation of a party under GCC Clauses 16.1 through 16.4 above, however, shall not apply to that information which:</p> <ul style="list-style-type: none"> <li>(a) now or hereafter enters the public domain through no fault of the Receiving Party;</li> <li>(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;</li> <li>(c) otherwise lawfully becomes available to the Receiving Party from a third party that has no obligation of confidentiality.</li> </ul>
	16.6	<p>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.</p>

		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.
<b>17.</b>	<b>Project Plan</b>	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 <b>specified in the SCC</b> shall be prepared by the Supplier and submitted to the Procuring agency in the format and frequency specified in the Technical Requirements.
<b>18.</b>	<b>Sub-contracting</b>	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.
<b>19. Procurement and Delivery</b>		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.
<b>20. Transportation</b>		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.	<b>Documents</b>	21.1	<p>Unless otherwise <b>specified in the SCC</b>, the Supplier will provide the Procuring agency with shipping and other documents, as specified below;</p> <p>(i) For Goods supplied from outside the Procuring agency's Country:</p> <p>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:</p> <ul style="list-style-type: none"> <li>(a) two copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount;</li> <li>(b) usual transportation documents;</li> <li>(c) insurance certificate;</li> <li>(d) certificate(s) of origin; and</li> <li>(e) estimated time and point of arrival in the Procuring agency's Country and at the site.</li> </ul> <p>(ii) For Goods supplied locally (i.e., from within the Procuring agency's country):</p> <p>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:</p> <ul style="list-style-type: none"> <li>(a) two copies of the Supplier's invoice showing the Goods' description, quantity, unit price, and total amount;</li> <li>(b) delivery note, railway receipt, or truck receipt;</li> <li>(c) certificate of insurance;</li> <li>(d) certificate(s) of origin; and</li> <li>(e) estimated time of arrival at the site.</li> </ul>
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			<p>(iii) Customs Clearance</p> <p>(a) The Procuring agency will bear responsibility for, and cost of, customs clearance into the Procuring agency's country in accordance the particular Incoterm(s) used for Goods supplied from outside the Procuring agency's country in the Price Schedules referred to by Article 2 of the Contract Agreement.</p> <p>(b) At the request of the Procuring agency, the Supplier will make available a representative or agent during the process of customs clearance in the Procuring agency's country for goods supplied from outside the Procuring agency's country. In the event of delays in customs clearance that are not the fault of the Supplier:</p> <p>(c) the Supplier shall be entitled to an extension in the Time for Achieving Operational Acceptance, pursuant to GCC Clause 26; the Contract Price shall be adjusted to compensate the Supplier for any additional storage charges that the Supplier may incur as a result of the delay.</p>
<b>22. Product Upgrades</b>	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.	
		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.	<b>Inspections and Test</b>	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.	<b>Installation of the System</b>	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.

<b>25. Commissioning</b>	25.1	<p>Commissioning of the System (or Subsystem if specified pursuant to the SCC for GCC Clause 26.1) shall be commenced by the Supplier:</p> <ul style="list-style-type: none"> <li>(a) immediately after the Installation Certificate is issued by the Project Manager, pursuant to GCC Clause 24.2; or</li> <li>(b) as otherwise specified in the Technical Requirement or the Agreed and Finalized Project Plan; or</li> <li>(c) immediately after Installation is deemed to have occurred, under GCC Clause 24.3.</li> </ul>
	25.2	<p>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.</p> <p>Production use of the System or Subsystem(s) shall not commence prior to the start of formal Operational Acceptance Testing</p>
<b>26. Operational Acceptance Tests</b>	26.1	<p>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.</p> <p>At the Procuring agency's discretion, Operational Acceptance Tests may also be performed on replacement Goods, upgrades and new version releases, and Goods that are added or field-modified after Operational Acceptance of the System.</p>
	26.2	<p>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.</p>

27.	<b>Operational Acceptance</b>	27.1	<p>Subject to GCC Clause 27.4 (Partial Acceptance) below, Operational Acceptance shall occur in respect of the System, when</p> <ul style="list-style-type: none"> <li>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</li> <li>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</li> <li>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</li> </ul>
		27.2	<p>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.</p>
		27.3	<p>After consultation with the Procuring agency, and within fourteen (14) days after receipt of the Supplier's notice, the Project Manager shall:</p> <ul style="list-style-type: none"> <li>(a) issue an Operational Acceptance Certificate; or</li> <li>(b) notify the Supplier in writing of any defect or deficiencies or other reason for the failure of the Operational Acceptance Tests; or</li> <li>(c) issue the Operational Acceptance Certificate, if the situation covered by GCC Clause 27.1 (b) arises.</li> </ul>

		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	<p>If the System or Subsystem fails to pass the Operational Acceptance Test(s) in accordance with GCC Clause 26.1, then either:</p> <p>(a) the Procuring agency may consider terminating the Contract, pursuant to GCC Clause 41;</p> <p style="text-align: center;">or</p> <p>(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.</p>
		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
<b>28. Partial Acceptance</b>		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.	<b>Warranty/ Defect Liability Period</b>	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 <b>SCC</b> .
		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.
<b>30. Intellectual Property Rights Indemnity</b>		30.1	<p>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:</p> <ul style="list-style-type: none"> <li>(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;</li> <li>(b) copying of the Software and Materials provided the Supplier in accordance with the Agreement; and</li> <li>(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.</li> </ul>
		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
<b>31. Insurance</b>		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 <b>SCC</b> .
<b>32. Limitation of Liability</b>		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
<b>33. Related Services</b>		33.1	The Supplier may be required to provide any or all of the following services, including additional services, if any, specified in <b>SCC</b> :
			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.
<b>34. Change Orders</b>		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.
<b>35. Contract Amendments</b>		35.1		Subject to <b>GCC Clause 34</b> , no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.
<b>36. Assignment</b>		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.
<b>37. Sub-contracts</b>		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.
<b>38. Delays in the Supplier's Performance</b>		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 <b>GCC Clause 41</b> , 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 <b>GCC Clause 39</b> , unless an extension of time is agreed upon pursuant to <b>GCC Clause 38.2</b> without the application of liquidated damages.
<b>39. Liquidated Damages</b>		39.1	Subject to <b>GCC Clause 41</b> , 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 <b>SCC</b> 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 <b>SCC</b> . Once the said maximum is reached, the Procuring Agency may consider termination of the Contract pursuant to <b>GCC Clause 40</b> .
<b>40. Termination for Default</b>		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 <b>SCC</b> ;
		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:
			<b>“Corrupt and Fraudulent Practice”</b> 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 <b>GCC Clause 26.1</b> , 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.
<b>41. Termination for Force Majeure</b>		41.1	Notwithstanding the provisions of <b>GCC Clauses 38, 39, and 40</b> , 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.
<b>42. Termination for Insolvency</b>		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.
<b>43. Termination for Convenience</b>		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.
<b>44. Transfer of Ownership</b>		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.	<b>Disputes Resolution</b>	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.	<b>Procedure for Disputes Resolution</b>	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 <b>SCC</b> .
		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 <b>SCC</b> .
47.	<b>Replacement of Arbitrator</b>	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.	<b>Notices</b>	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 <b>SCC</b> .
		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
<b>Definitions (GCC 1)</b>		
1.	1.1	The Procuring Agency is: <b>PAKISTAN SECURITY PRINTING CORPORATION (Pvt.) Ltd. (PSPC) Jinnah Avenue Malir Halt Karachi</b>
2.	1.1(j)	The Supplier is: <i>[Name and address]</i>
3.	1.1(q)	The title of the subject procurement or The Project is: <b><i>Supply, Installation, Implementation, Maintenance and Technical Support of Enterprise Resource Planning (ERP) and Track &amp; Trace Solution</i></b>
<b>Governing Language (GCC 4)</b>		
4.	4.1	The Governing Language shall be: English
<b>Applicable Law (GCC 5)</b>		
5.	5.1	The Applicable Law shall be: <b>Laws of the Laws of Pakistan</b>
	5.2	The Contract shall be effective from the date award of contract
<b>Country of Origin (GCC 6)</b>		
6.	6.1	Country of Origin is the country where offered items is/are manufactured.
<b>Scope of the System (GCC 7)</b>		
7.	7.1	The Scope of the System is as mentioned in the technical specification area of this document
<b>Supplier Responsibilities (GCC 8)</b>		
8.	8.1	The Supplier shall have the following additional responsibilities: <i>As per PPR 2004</i>

<b>Procuring Agency's Responsibilities (GCC 9)</b>																		
9.	9.1	The Procuring agency shall have the following additional responsibilities: <i>N/A</i>																
<b>Price (GCC 10)</b>																		
10.	10.1	Prices shall be adjusted in accordance with provisions in the Attachment to SCC.  <i>This will be applicable in second stage of bidding, hence will be finalized in second stage</i>																
<b>Payment (GCC 11)</b>																		
11.	11.1	Payment for Cost of Software Solution shall be made in Pakistani Rupees (PKR), as follows: <table border="1" data-bbox="576 814 1291 1186"> <thead> <tr> <th>Phases</th> <th>Payment Schedule in %</th> </tr> </thead> <tbody> <tr> <td>Design</td> <td>10</td> </tr> <tr> <td>Development</td> <td>10</td> </tr> <tr> <td>Implementation</td> <td>15</td> </tr> <tr> <td>Initiation</td> <td>15</td> </tr> <tr> <td>Operation</td> <td>15</td> </tr> <tr> <td>Production</td> <td>15</td> </tr> <tr> <td>Testing</td> <td>20</td> </tr> </tbody> </table>	Phases	Payment Schedule in %	Design	10	Development	10	Implementation	15	Initiation	15	Operation	15	Production	15	Testing	20
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Design	10																	
Development	10																	
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Testing	20																	
12.	11.3	Not Applicable																
<b>Performance Guarantee (GCC 12)</b>																		
13.	12.1	The amount of performance guarantee, as a percentage of the Contract Price, shall be: <i>2 % for the whole period of contract.</i>																
<b>Software License Validity (GCC 15)</b>																		
14.	15.1 (a)(iii)	The Standard Software license shall be valid [ <i>state: "throughout the territory of the Procuring agency's Country;" or specify: geographical coverage other than the Procuring agency's Country, if such coverage is necessary and appropriate, for example to cover the area in which the Procuring agency's business group operates in</i> ].																
<b>Confidential Information (GCC 16)</b>																		
15.	16.1	<i>State: "There are no modifications to the confidentiality terms expressed in GCC Clause 16.1;" or, if necessary and appropriate, specify:</i>																

		<b>persons, topics, and conditions for which the confidentiality clause does not apply.</b>
16.	16.7	<p><i>The provisions of this GCC Clause 16 shall survive the termination, for whatever reason, the purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:</i></p> <p><i>A- If the supplier fails to deliver any or all of the goods within the period(s) specified in the contract, or within any extension thereof.</i></p> <p><i>B- If the supplier fails to perform any other obligations(s) under the contract.</i></p> <p><i>C- If the supplier, in the judgment of purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract. In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods &amp; services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods or services. However, the supplier shall continue performance of the contract to the extent not terminated</i></p>
<b>Project Plan (GCC 17)</b>		
17.	17.1	<p>Chapters in the Project Plan shall address the following subject: <i>[for example, specify:</i></p> <ul style="list-style-type: none"> <li><b>(a) Project Organization and Management Plan;</b></li> <li><b>(b) Delivery and Installation Plan</b></li> <li><b>(c) Training Plan</b></li> <li><b>(d) Pre-commissioning and Operational Acceptance Testing Plan</b></li> <li><b>(e) Warranty Service Plan</b></li> <li><b>(f) Task, Time, and Resource Schedules</b></li> <li><b>(g) Post-Warranty Service Plan (if applicable)</b></li> <li><b>(h) Technical Support Plan (if applicable)</b></li> <li><b>(i) etc.</b></li> </ul> <p><b>Further details regarding the required contents of each of the above chapters are contained in the Technical Requirements, SECTION V: SCHEDULE OF REQUIREMENTS, TECHNICAL SPECIFICATION</b></p>

<b>Documents (GCC 21)</b>		
18.	21.1	The Supplier shall provide to the Procuring agency documents <i>[state “as specified in the GCC,” or specify other documentation requirements as necessary and appropriate].</i>
<b>Products Upgrade (GCC 22)</b>		
19.	22.1	The Supplier shall provide the Procuring agency: <i>[state “with all new versions, releases, and updates to all Standard Software during the Warranty Period, for free, as specified in the GCC,” or specify other requirements as necessary and appropriate</i>
<b>Inspections and Tests (GCC 23)</b>		
20.	23.1	<i>As mentioned in SECTION V: SCHEDULE OF REQUIREMENTS, TECHNICAL SPECIFICATION</i>
<b>Installations (GCC 24)</b>		
21.	24.1	<i>As mentioned in SECTION V: SCHEDULE OF REQUIREMENTS, TECHNICAL SPECIFICATION</i>
<b>Operational Acceptance Test (GCC 26)</b>		
22.	26.1	<i>As mentioned in SECTION V: SCHEDULE OF REQUIREMENTS, TECHNICAL SPECIFICATION</i>
<b>Defect Liability (GCC 29)</b>		
23.	29.1	For Software, exceptions or limitations to the Supplier’s warranty obligations shall be as follows: <i>[To be finalized in Second Stage].</i>
<b>Liquidated Damages (GCC Clause 39)</b>		
24.	39.1	Applicable rate: <i>2% per month</i>  Maximum deduction: is equal to the performance security. The SUPPLIER shall pay to the BUYER at the rate of 2% per month or part of month for the value of the stores which the SUPPLIER has failed to deliver within the stipulated period, provided that damages shall not

		exceed 10% of the total price payable under the Purchase Contract, otherwise BUYER will make deduction from SUPPLIER'S bill. After which the purchaser may consider termination of the contract.
<b>Procedure for Dispute Resolution (GCC Clause 45)</b>		
25.	45.1	<p><b>Dispute Resolution</b></p> <p>In case of any dispute and difference which may arise in connection with the execution of the contract, the matter shall be referred to Managing Director of Corporation, who shall take decision in the matter.</p> <p>In case the dispute remains unresolved, the matter will be resolved through arbitration as per the Arbitration Act, 1940.</p>
<b>Notices (GCC Clause 48)</b>		
26.	48.1	<p>— Procuring Agency's address for notice purposes: <i>(to be inserted at the time of contract signing)</i></p> <p>—Supplier's address for notice purposes: <i>(to be inserted at the time of contract signing)</i></p>

## **SECTION IX: CONTRACT FORMS**

**Form of Contract**

THIS AGREEMENT 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) the Form of Bid and the Price Schedule submitted by the Bidder;
  - (c) the Schedule of Requirements;
  - (d) the Technical Specifications;
  - (e) the Special Conditions of Contract;
  - (f) the General Conditions of the Contract;
  - (g) the Procuring Agency’s Letter of Acceptance; and
  - (h) *[add here: any other documents]*
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.

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.

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the Procuring Agency)

Witness to the signatures of the Procuring Agency:

.....

Signed, sealed, delivered by \_\_\_\_\_ the \_\_\_\_\_ (for the Procuring Agency)

Witness to the signatures of the Supplier: .....

**Performance Security (or guarantee) Form**

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]*

## Integrity Pact

### **DECLARATION OF FEES, COMMISSION AND BROKERAGE ETC. PAYABLE BY THE SUPPLIERS OF GOODS, SERVICES & WORKS IN CONTRACTS WORTH RS.10.00 MILLION OR MORE**

**Contract Number:** \_\_\_\_\_

**Dated:** \_\_\_\_\_

**Contract Value:** \_\_\_\_\_

**Contract Title:** \_\_\_\_\_

[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 times 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.

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[Buyer]

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[Seller/Supplier]