PUNJAB SKILLS DEVELOPMENT FUND

TENDER DOCUMENT

DEVELOPMENT OF BUSINESS SUPPORT SYSTEM (BSS) APPLICATION

May 2019

Submission Date for Tender: June 12, 2019 before 11:00 AM

21-A, H-Block, Dr. Mateen Fatima Road, Gulberg-II, Lahore Pakistan

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1- Invitation to Bids

Punjab Skills Development Fund (PSDF) is a section 42, not-for-profit Company set up under the Companies Ordinance 1984 by the Government of the Punjab. Sealed bids/proposals will be invited from established firms/companies for **Development of Business Support System (BSS) Application** (hereafter called as bidders) to PSDF. All interested and eligible bidders are requested to go through the Tender document and provide relevant information along with supporting documents mentioned in this tender document.

2- Instruction to Bidders

The selection of firm/company will be based on **Quality & Cost Based Selection (QCBS) Method** through **Single Stage Two Envelopes** bidding procedure where 80% weightage will be given to quality and 20% to cost.

a) The bid shall be a single package consisting of two separate envelopes, containing separately Technical and Financial proposals. Technical Proposal shall be placed in a sealed envelope clearly marked "TECHNICAL PROPOSAL" Similarly, the Financial Proposal shall be placed in a sealed envelope clearly marked "FINANCIAL PROPOSAL" followed by the name of the assignment. The envelopes containing the Technical and Financial Proposals shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address and title of the Assignment (**Development of Business Support System (BSS) Application to PSDF**).

b) In the first instance, the "Technical Proposal" shall be opened and envelope marked as "Financial Proposal" shall be retained unopened in the custody of PSDF.

c) PSDF shall evaluate Technical Proposal in a manner prescribed in section – **10** given in the document, without reference to the price and condition shall reject any proposal which does not conform to specified requirements.

d) During the technical evaluation no amendments in Technical Proposal shall be permitted.

e) After the evaluation and approval of the technical proposals, the fund shall open the financial proposals of the technically responsive bids, publicly at a time, date and venue announced and communicated to the bidders in advance, within the bid validity period.

f) The financial bids found technically non-responsive shall be returned un-opened to respective bidders.

g) The Technical and Financial Proposal will be evaluated based on PSDF's evaluation criteria as provided in section – **10** and **11** of document.

h) This document has different sections carrying information of eligibility, technical evaluation and Scope of Work, conditions of tender, type of contract etc. to assist potential bidders to develop their Technical Proposals. Bidders those found eligible and qualify in technical evaluation will be short-listed for financial bid opening.

i) Contract shall be awarded on quality and cost-based method with combined evaluation of the Technical and Financial Proposals. ***The weight of quality shall be 80% and 20% weightage shall be given to cost.***

j) Passing criteria for Technical Evaluation shall be minimum 65 marks.

3- Conditions for Eligibility

The successful bidder, fulfilling the following criteria, will be considered as an eligible bidder for the evaluation process;

1. Firm/Company must be regular taxpayer (Last annual tax return 17-18 is only acceptable)
2. Provide NTN, GST/PST details, if applicable. (Copy of Certificates)
3. Evidence of firm/company's registration/ incorporation is required. (certificate of Registration/ Incorporation is required)
4. Must not be blacklisted by any government/ semi-government/autonomous body/ any organization (Declaration on stamp paper)
5. Bidding through joint venture (JV) of any kind is not allowed to participate in the bid. (Please provide a declaration on letterhead)
6. Minimum 2 Customized Software Development projects each project worth of PKR 10 million and above for any organization. (Copies of contracts/ Service orders must be provided as documentary proof of evidence to establish the worth of the projects)
   (*Customized Software Solution* is a solution that is specially developed (coded) for a specific user or organization)
7. Compliance to the following SLA Annexure F (signed and stamped on letter head is required)
8. A signed and stamped letter is required by the bidding organization that their proposed solution completely complies with all the requirements mentioned in the Scope of Work in this document (signed and stamped on letter head is required)

Any, failure to provide information as per the above mentioned or fulfillment under the requirement of, "Eligibility Criteria Checklist" bidder shall be deemed to be or declared ineligible for the bidding process and its technical evaluation will not be carried out.

Note: Please mark/flag the supporting documents for Eligibility Criteria Checklist.

4- Scope of Work

a. Project Scope
Scope of the development of BSS is strictly limited to the Program (Training Services) and its allied processes only and BSS will work within its boundaries i.e. after Contract award to Payable/Receivable Calculation and payment Posting shall be done in the SAP and Analytical, conventional and ad-hoc report generation and analysis will be done in BSS

Detail scope is specified in **annex-I**

5- General or Special Conditions of Contract

a) PSDF reserves the right to award or not to award the contract and Bidders who fail to complete and attach all the relevant documents shall deem to be or declared to be ineligible.

b) No tender document shall be accepted, if not **properly sealed, marked, signed and stamped.**

c) Bidders to ensure that their bid documents are submitted before the closing time and date of the tender. **Bids received after the closing time and date will NOT be accepted.**

d) All documents and information received by PSDF from applicants will be treated in strict confidence. Documents submitted to PSDF will not be returned.

e) All expenses related to participation in this bidding document shall be borne by the bidder.

f) Documents shall be submitted in hard copies in a sealed envelope marked as "PROPOSAL" as a hard copy in a sealed envelope for **"Development of Business Support System (BSS) Application."** The envelope containing hard copies of the technical proposal and financial proposal shall be received on the postal address given below.
Procurement Department: -
Punjab Skills Development Fund, 21-A, H-Block, Dr. Mateen Fatima Road, Gulberg-II Lahore
E-mail: Procurement@psdf.org.pk Phone: +92-42-35752408-10, Fax: +92-42-35752190.

g) To attend pre-bid meeting organization has to get confirmation on the reservation request pre-bid meeting requests should be emailed at E-mail: Procurement@psdf.org.pk on or before **28 May 2019**, any organization joining without email request will not be allowed to participate in the pre-bid meeting. Pre-bid meeting will be held on **30 May 2019 at 11:00 AM** in PSDF Lahore office

h) PSDF also reserves the right to verify any information provided by the applicants or may visit business premises to verify the information shared in tender documents.

i) Bidder presenting information intentionally incorrectly or fraudulently will be disqualified.

j) Questions about this technical proposal can be made only in writing through an e-mail and must be asked by or before 2 days of bid submission date. For any other related information please contact at Procurement@psdf.org.pk.

Note: Although adequate thought has been given in the drafting of this document, errors such as typos may occur without any responsibility on PSDF's part.

6- Form of Contract

a) The successful bidder shall sign and execute the standard contract of PSDF including any general conditions on the terms and conditions specified therein. Any amendment to the standard contract shall be made with the mutual consent of both parties.

b) The successful company will sign a contract and shall provide the agreed services within the stipulated agreed time of issuance of the Purchase Order.

c) The penalty shall be imposed on the successful bidder if he fails to deliver the goods/services on agreed terms & conditions mentioned in the bidding document and contract.

d) In case of any dispute regarding goods/services, the decision of the PSDF shall be final & binding.

e) The PSDF may reject all bids or proposals at any time prior to the acceptance of a bid or proposal. PSDF shall upon request communicate to any Firm/Company, the grounds for its rejection of all bids or proposals but shall not be required to justify those grounds.

f) The PSDF undertakes to pay the valid and complete invoice based on the successful performance of the successful bidders within thirty (30) days after the delivery of goods/services.

g) PSDF will only make the payments in PKR.

h) All taxes will be deducted in accordance with applicable laws.

i) The bid shall remain valid for the period of **120 days** from the date of opening.

7- Form of Bid

The Bidders shall follow the Form of Bid specified in **Annex E.**

8- Completion Date

Complete Project Development and Implementation date will be calculated after issuance of

PO and as per the Project Plan submitted by the bidder but in any case, it should not exceed

6 calendar months. However, PSDF has the right to change it after mutual agreement.

9- Performance Security

a) The successful bidder will submit a performance guarantee (or any other form of performance security acceptable to PSDF) of 3% of contract value at the time of signing the contract which will be returned after completion of the contract.

b) Any delay in development delivery or deployment of the BSS application as per agreed time frame will be subject to a penalty of @1% per day, up to a maximum 10% of the total contract value.

10- Technical Evaluation Criteria

This document is governed by the procedure approved by PSDF management and PSDF, Procurement Rule, 2016. The technical proposal of eligible organizations will be evaluated against requirements specified in the in **"Annex – D"**.

11- Financial Evaluation Criteria

The Financial Proposals of only eligible bidders with technically qualified will be opened in the presence of all qualified bidders. All bids shall be opened publicly in the presence of bidders or their representatives who may choose to be present, at the time and place announced prior to the financial proposal opening and person designated for PSDF shall read aloud the unit price as well as the bid amount and shall record the minutes of the bid opening. All bidders shall sign an attendance sheet at the time of bid opening. Please provide information regarding Financials in **Annex – E"**.

12- Submission of Bids (Technical and Financial Proposal): -

A complete bid containing Technical and Financial proposal along with Bid Security, all required information and documentary evidence must be submitted before closing date i.e.-

June 12, 2019 at 11:00 AM-. Technical proposals will be publicly opened on the same day June 12, 2019, at 11:30 AM in the presence of bidder's representatives who wish to attend it. Bid

Security of disqualified bidders will be returned after awarding the business to the successful bidder.

a. Bid Security

Bid Security of Rs. 50,000 (Fifty Thousand) in the form of pay order or demand draft favoring Punjab Skills Development Fund shall be submitted along with the proposal. The Bid Security should be valid for a period not less than 6 months.

b. Cover Letter for the Submission of Technical Proposal

A cover letter as specified in **Annex H** shall be submitted with the proposal.

Annex – A Organizational Information

Sr. #	Required Information	Response		
	Organization Information			
	Required Information	**Response**		
1	Legal name of the organization			
2	Year of Registration / Establishment of the Organisation			
3	National Tax Number			
	General / Punjab Sales Tax Number			
5	What is the legal status of your organization? Tick the relevant box (one box only).	Public Sector Organisation		
		Section 42 Company		
		Public Ltd. Company		
		Private Ltd. Company		
		Private Partnership Firm		
		Others (Please specify)		
6	Name and designation of 'Head of Organization'			
7	Mobile:			
	Phone/s:			
	Email:			
	Fax:			
	Address of organization:			
	Website address:			
8	Name and designation of 'Contact Person':			
	Phone/s:			
	Mobile:			
	Email:			
	Fax:			

	Eligibility Check List				
Sr. No	Eligibility Criteria Details	Response/Elaboration/Proof Required	Flag/Marker Reference	Attached Supporting Documents/Proof and mark Yes/No	
				Yes	No
1	Firm/Company must be regular taxpayer	(Last annual tax return 17-18 is only acceptable)		☐	☐
2	Provide NTN, GST/PST details, if applicable.	(Copy of Certificates)		☐	☐
3	Evidence of firm/company's registration/ incorporation is required.	(certificate of Registration/ Incorporation is required)		☐	☐
4	Must not be blacklisted by any government/ semi-government/autonomous body/ any organization	(Declaration on stamp paper)		☐	☐
5	Bidding through joint venture (JV) of any kind is not allowed to participate in the bid.	(Please provide a declaration on letterhead)		☐	☐
6	Minimum 2 Customized Software Development projects each project worth of PKR 10 million and above for any organization.	(Copies of contracts/ Service orders must be provided as documentary proof of evidence to establish the worth of the projects) (Customized Software Solutions is the solution that is specially developed (coded) for a specific user or organization)		☐	☐
7	Compliance to the following SLA **Annexure F**	(signed and stamped on letter head is required)		☐	☐
8	A signed and stamped letter is required by the bidding organization that their proposed solution completely complies with all the requirements mentioned in the **Scope of Work** in this document	(signed and stamped on letter head is required)		☐	☐

	Relevant Experience	
Sr. #	**Required Information**	**Response** **(Please provide exact information with organization name, location/s, and duration)** Provide data in the sequence given below
1	Name of Organizations with addresses	i. ii. iii. iv.
2	Start and end dates of providing Goods/Services (For example – Jan 2009 to September 2017)	i. ii. iii. iv.
3	Goods/Services provided to Number of firms/companies	i. ii. iii. iv.

Job Role	Minimum Experience and Qualification
Project Manager / Team Leader	**Experience**: 15 Plus Years **Qualification**: Master's in Computers Science or related
Solutions Architect	**Experience**: 9 Plus Years out of which 3 Years of relevant experience **Qualification**: Bachelor's in Computers Science or related
Systems Analyst/Business Analyst	**Experience**: 3 Plus Years of relevant Experience, **Qualification**: Bachelor's in Computers Science or related
Development Lead	**Experience**: 6 Plus Years of Software Development Experience **Qualification**: Bachelor's in Computers Science or related
QA Lead	**Experience**: 5 Plus Years **Qualification**: Bachelor's in Computers Science or related
Software Development Engineers (Frontend & Backend)	**Experience**: 3 Plus Years of Experience in .Net Programming (Backend) and At least experience with any of the Two Frontend Frameworks AngularJS, jQuery, Bootstrap, Foundation, Semantic UI (Frontend) **Qualification**: Bachelor's in Computers Science or related
QA Engineer	**Experience**: 3 Plus Years as QA Engineer **Qualification**: Bachelor's in Computers Science or related
Database Development Expert	**Experience**: 5 Plus Years as SQL DBA Engineer or 2 Years with MS SQL Certification (Attach Certificate) **Qualification**: Bachelor's in Computers Science or related
SAP Integration Expert	**Experience**: 3 Plus Years of SAP Integrations **Qualification**: Bachelor's in Computers Science or related
InfoSec Expert	**Experience**: 3 Plus Years as Information Security Expert **Qualification**: Bachelor's in Computers Science or related
SCM Engineer	**Experience**: 2 Plus Years **Qualification**: Bachelor's in Computers Science or related

Note: These are the minimum qualification requirement

Name of Project	[Name of Project]		Duration of the Project	Start: MM/YYYY End: MM/YYYY [X: Years, X Months]	Award Year	YYYY
Client Name	[Client Name] Sector: [Private/Public]		Client Industry		Name of the Client Industry	
Development Type	o Web Application Development o Desktop Application Development o Web Portal Development Other: _____ (share Details)		Technologies used for Development		[Name of Technology]	
Project Summary	Please Provide Project Summary					
Project Value (PKR)	PKR XXXXXXXX.XX					

C.3.1 Work/ Service Order of the Project

Copy of Work/ Service order or Copy of the Contract

S. No.	Descriptions	Total Points	Category Points	Flag/Marker Reference(s)	Remarks
Technical Evaluation Criteria					

S. No.	Descriptions	Total Points	Category Points	Flag/Marker Reference(s)	Remarks
	Technical Evaluation Criteria (Attachment of relevant evidence in each case is mandatory. In case of non-compliance no mark will be awarded)				
1	**General Experience**	15			Documentary proof (copies of the contract or work/service order) should be furnished. Please provide details of the as per Annexure C.3 Project Template **Note: Hardware cost will not be accounted**
	Total value of software projects in last 8 years, cumulative worth more than PKR 500 million.		15		
	Total value of software projects in last 8 years, cumulative worth less than or equal to PKR 500 million and more than PKR 300 million		10		
	Total value of software Projects in last 8 years, cumulative worth less than or equal to PKR 300 million and more than or equal to PKR 200 million		5		
2	**Relevant Experience (Number of Contracts)**	20			Documentary proof (copies of the contract or Service Order) should be furnished Along with project Summary. Please provide details of the customized software development as per Annexure C.3 Project Template
	Developing *Customized Software Solution; (Total number of assignments/projects more than or equal to 8) in last 8 Years		20		
	Developing *Customized Software Solution; (Total number of assignments/projects more than or equal to 5 but less than 8) in last 8 Years		10		
	Developing *Customized Software Solution; (Total number of assignments/projects more than or equal to 2 but less than 5) in last 8 Years		5		
3	**Financial Capability**	20			Copy of last financial audit report done by ICAP registered auditing firm or tax return of last year (17-18)
	Annual revenue/turnover of the company should be greater than PKR 200 million		20		
	If annual revenue/turnover is less than or equal to PKR 200 million but greater than PKR 150 million		15		
	If annual revenue/turnover is less than or equal PKR 150 million but greater than PKR 100 million		10		
4	**Similar Projects done for a public Sector organization**	5			Documentary proof (copies of the contract or Service Order) should be furnished Along with project Summary. Please provide details of the customized software development as per Annexure C.3 Project Template
	Customized Software solutions Project done for public sector organization.		5		
5	**Support & Maintenance**	10			Documentary details of support and maintenance office on company's letterhead with address of Offices.
	Support & Maintenance Office and Staff that Resides in Lahore		10		
	Support & Maintenance Office Resides within Pakistan but not in Lahore		5		
6	**Software Project Team**	30			Resumes should be provided
	Project Manager / Team Leader		4		

				Minimum Qualification & Experience Matrix is provided in Table C.2
Solutions Architect		4		
Systems Analyst/Business Analyst		3		
Development Lead		3		
QA Lead		2		
Software Development Engineers (Frontend & Backend)		5		
QA Engineers		1		
Database Development Expert		2		
SAP Integration Expert		4		
InfoSec Expert		1		
SCM Engineers		1		
Total Technical Score (TTS)	**100**			

Note:

- **Please mark/flag the supporting documents for Evaluation Criteria.**
- **Projects without work/service order/ contracts shall not be considered in calculating technical score**
- **Bold and Highlighted above software project team positions are mandatory**

* Customized Software Solutions – is the solution that is specially developed (coded) for a specific user or organization, which is in contrast with broadly used mass-market software. Despite the diverse spectrum, the software market often is not able to meet the demands of all varieties of organizations.

Form of Bid/ Financial Proposal

Sr. No.	Description	Amount (PKR)
	BSS Software Development, Implementation, Integration, Licenses, Post Implementation 6 Months of FOC Support etc. If any licenses are required bidder will add 3 Year cost of those licenses within the head of **"Total Project Cost"**.	
Project Cost		
A	Total Project Cost (as per SOW)	
Sr. No.	**Description**	**Amount (PKR)**
SUPPORT COST (Post FOC Support)		
B	On-site/Offsite 6 Months Support (After completion of FOC Support period)	
Sr. No.	**Description**	**Per Man Day Rate (PKR)**
Change Request Cost		
C	Per Man Day Cost (in case of any change request)	
Total Cost (A+B+C)		

X= Total Financial Cost of the Project for Financial comparative analysis = (A + B + (C x 100)) x 0.2

Y= Total Technical Score = (TTS) x 0.8

Project Score Value = X + Y

Business Award:

Business will be awarded on the base of the Project Score Value

Payment shall be made as per payment plan provided in Scope of work Section.

SERVICE LEVEL AGREEMENT

Severity Level	Response/Acknowledgment Time (During Business Hours)	Turn Around Time (During Business Hours)	Turn Around Time (After During Business Hours)	Resolution Time
Severity 1	30 minutes	60 Min	Under 4 hours	4 - 8 hours
Severity 2	1 hour	Within 8 hours	Not applicable	Within 24 hours
Severity 3	1 hour	Within 16 hours	Not applicable	Within 48 hours

NOTE:

*Hours mentioned above our business hours during 09:00 am to 6:00 pm PST.

*Turn Around Time is the time required for Support Team to engage a team to work on the issue reported.

*Resolution Time is the business hours required for the team for a fix.

Penalty Clauses

Severity 1: 0.5% penalty of the Monthly Support Cost on level 1 severity

Severity 2: 0.2% penalty of the Monthly Support Cost value imposed after every 24 hrs delay

Severity 3: 0.125% penalty of the Monthly Support Cost value imposed after every 48 hrs delay

Severity Level	Description
Severity 1	Services Disruption/outage that effect users to perform their desired Tasks Software / Application Bug that leads to service outage.
Severity 2	Services degradation that impacts more than one user to perform their desired Tasks. Or Service Disruption with in the Reporting Module which will cause Delay in the System Reporting Software Malfunction that lead to service degradation, Incorrect Calculation of Numbers
Severity 3	Any kind of issue that is affecting one or more than one user

Declaration

Kindly provide the declaration as per format provided below at the end of the proposal.

I, _____ hereby declare that:

- all the information provided in the technical proposal is correct in all manners and respects
- and I am duly authorised by the Governing body/Board/Management to submit this proposal on behalf of "[Click here and type the name of organization]"

Name	
Designation	
Signature	
Date and Place	

Cover Letter for the Submission of Technical Proposal

[*Firm/Company letterhead*]

[*Date*]

To

Chief Executive Officer

[Address mentioned in Guide lines]

Re: Technical Proposal in respect of [Insert title of assignment]

Dear Sir,

We offer to provide the Services **for Development of Business Support System (BSS) Application** in accordance with your Tender for Proposal dated [Insert Date of Tender advertised]. We hereby submit our technical Proposal including the required documents in a sealed envelope.

Further, we hereby also declare that all the information and statements made in these proposals are true and accept that any misinterpretation contained therein may lead to our disqualification. Our proposal is binding upon us and subject to the modifications resulting from contract negotiations. We undertake that we will initiate the services as per the client's request if our proposal is accepted. We understand that you are not bound to accept any or all proposals you receive.

Thank you.

Yours sincerely,

Signature

Name and title of signatory:

1. Project Scope

Scope of the development of BSS is strictly limited to the Program (Training Services) and its allied processes only and BSS will work within its boundaries i.e. after contract award to Payable/Receivable calculation and payment posting shall be done in the SAP and Analytical, conventional and ad-hoc report generation and analysis will be done in BSS.

2. List of All Stakeholders

2.1 PSDF Internal Departments

Sr. No	Name	Acronym
1	Program Development Department	PD
2	Strategy & Business Development	SBD
3	Research & Planning	R&P
4	Partnership and Placement Department	P&P
5	Marketing and Communication Department	M&C
6	Monitoring and Evaluation Department	M&E
7	Information Technology	IT
8	Finance & Accounts	
9	Procurement	
10	Resource & Administration	
11	Internal Audit	
12	Audit Risk and Compliance	
13	Executive Management	

2.2   PSDF Internal Committees

Sr. No	Name	Acronym
1	Board of Directors	BOD
2	Bid Evaluation Committee	BEC
3	Program Evaluation Committee	
4	Procurement Evaluation Committee	
5	Technical Evaluation Committee	
6	Financial Evaluations Committee	
7	Grievance Redressal Committee	
8	Board of Directors Committee	

2.3   PSDF External Stakeholders

Sr. No	Name	Acronym
1	Training Services Provider	TSP
2	Overseas Employment Promoters	OEP
3	Placement Services Provider	PSP
4	Third Party Monitoring	TPM
5	National Database & Registration Authority	NADRA
6	Punjab Board of Technical Education	PBTE
7	Higher Education Commission	HEC
8	Higher Secondary School	HSS
9	Benazir Income Support Program	BISP
10	Contact Center (Call Center)	CC
11	Senior Management Committee	SMC
12	Purchase Approval Note	PAN
13	Legal Advisor / (Law Firm)	
14	3rd Party Bidding Evaluation Firm	
15	3rd Party Stakeholders (Data Entry, Testing Agency etc.)	
16	Local / International Certificate Agencies	
17	International Testing Body	
18	Donors / Agencies / Regulators	
19	Trainees	

2.4   Other Acronyms used in Section 5 (Scope of Work)

Sr. No	Name	Acronym
1	Management Information System	MIS
2	Business Support System	BSS
3	Application Program Interface Gateway	API GW
4	Data Warehouse	DWH
5	DMS Application	DMS
6	Android Monitoring System	AMS
7	Application Program Interface Gateway	API GW
8	Data Warehouse	DWH
9	Data Management System	DMS
10	Cost per trainee per month (CTM)	CTM
11	Expression of Interest	EOI
12	Key Performance Indicators	KPI
13	Program Development and Evaluation Center	PDEC
14	3rd Party Evaluation	TPE
15	Purchase Approval Note	PAN
16	Account Payable Invoice	AP Invoice
17	GL Code	GL
18	Free of Cost	FOC

3. PSDF Core Data Segments

- By Group (Group of Companies)

- By Virtual Company

- By Project (Donner Project)

- By Program

  - Competitive Bidding

  - Cost Sharing

  - Generation

  - Etc.

- By Scheme Type

  - Industry

  - FTIs

  - Community

  - Etc.

- By Scheme

- By Geographic Clusters

- By Sector & sub-Sector

- By Trade

- By Duration

- By TSP

- By Gender

Note: There could be few more Data Segments that need to explore and record during detailed business analysis and development phase

4. Procurement Department

Program begins with the Procurement process. PSDF procurement complies with PAPRA (Punjab) rules and PSDF Procurement rules.

4.1 In-Scope for the BSS

4.1.1 Scheme Appendix input into the BSS
Scheme appendix is an output of the E-Procurement and would be an Input for the BSS. We need BSS Integration with E-Procurement via either web services, bulk Import and Manual Input of Appendix into BSS via input forms.

4.1.2 After inputting Appendix Data, a configurable workflow management process is required for approvals

4.1.3 Change control process is required for any change to input data

For all the changes Audit Logs will be required

4.1.4 Once Data is Imported into the system; System Should Automatically Create Required Elements

- Scheme

- Create new TSPs or/and Assignee TSPs to the Scheme

- Create Classes in the Scheme

- Etc.

Note: all the business rule must apply, and Audit trail must be kept

4.2 Informative Information (Out of Scope)

4.2.1 Programs Designing

4.2.2 Program Approval Notes

4.2.3 Budget Allocation

4.2.4 E-Procurement

- Tender Preparation

- Tender Publishing

- Bidding through (Competitive Bidding Procurement etc.)

- Evaluation and Qualification of Bidder

- Financial Opening

- Tender Award Process

5. Business Department

The Role of the Program development is limited to the Designing of the Scheme and they are mostly responsible for the Analytical data analysis

5.1 In-Scope for the BSS

5.1.1 Design Scheme Concept

Based on the analytical reports with different data segment and business requirements

5.1.2 TSP wise allocation of trainees

5.1.3 Trade wise group ranking and/or region wise

5.1.4 Allocation based on Supply & Demand

5.1.5 Trade Benchmarking based on Pervious Data/Contract Awards.

5.2 Informative Information (Out of Scope)

5.2.1 Factors that influence Scheme Design

- Donor(s)
- PSDF Management
- Market or Sector Demand
- Availability of Curriculum
- Sector Surveys, Reports and Studies along with Operational Evidence
- PSDF Annual, Half Yearly & Quarterly Targets
- Other stakeholders (Govt. of Punjab, PDEC, TSP, PSP, Chambers, Industries, Establishment, NGO, Associations, etc.)

5.2.2 Launching/Publishing of New Scheme(s)

5.2.3 Mobilization of TSPs

5.2.4 Intro Session with the TSPs

6. Business Development & Partnership Department

6.1 In-Scope for the BSS

6.1.1 Cost Sharing/Local Partnerships Programs

6.1.2 Cost-Sharing Trade benchmarking

6.1.3 To identify the cost to be paid to the employers, benchmark trades are required from the Program Development team and (Average)cost is required from the Finance team.

6.1.3.1 Kick off Partnership Model with Employer / Monitoring

After contract signing, orientation and Mobilization Commencement of classes. Payments: Payments are given to employers from PSDF's finance department after verification of invoices by M&E

6.1.4 International Placement Program

6.1.4.1 Onboarding of trainees after selection

6.1.4.2 Onboarding of TSP

TSP selected by International employer is on-boarded and training is initiated

6.1.4.3 Monitoring

Standard monitoring practices for TSPs are followed

6.1.4.4 Employment of Successful graduates

Successful graduates join the international employer after receiving their visas from them

6.1.4.5 Payments

Payments are given to TSPs from PSDF's finance department after verification of invoices by M&E

6.1.5 Miscellaneous Program

6.1.5.1 Onboarding of trainees

Collection of resumes by advertisement of trades

Shortlisting of candidates by Generation team

Selected candidates are placed in training

6.1.5.2 Monitoring

Monitoring rules are different for Generation programs since Generation also has a set of rules that is followed for monitoring

6.1.5.3 Employment of Successful graduates

Successful graduates are presented to employers for interviews and selection

6.1.5.4   Payments

TSP payments are made by PSDF after verification of invoices by M&E and Generation

The employers pay the training cost that is aligned with them before training to PSDF for every resource that they hire after they successfully complete training

6.1.6   Business Development

6.1.6.1   Meeting Planner, Feedback, Reminder, Email Notification with the Corporate Clients

Share a basic proposal to run a customized training program on their behalf as per our partner(s) requirements and need

Visit various Corporates and blue-chip companies which have CSR and or training budgets for evaluating the potential of collaborating with them.

6.1.6.2   Aligning trades and districts for the training program

Once we have briefly evaluated the scope of collaboration we engage with our potential partner(s) to shortlist the trades and districts for running the customized program

Visit the proposed locations and training sites

Share tentative costs and Management fee for the program

Finalize proposed terms for the training program as required by our corporate partner

6.1.6.3   Monitoring

Standard monitoring practices for TSPs are followed

6.1.6.4   Placement of trainees

Follow up with TSPs to arrange placement of trainees

6.1.6.5   Payments

Payment rules for self-sustainability model to be shared by finance since under this model we will be charging employers for training cost and a management fee

6.2   Informative Information (Out of Scope)

6.2.1   Cost Sharing/Local Partnerships
- Identity Potential Companies & Employment Players
- Visit Industries and employers for evaluation

6.2.2   International Placement
- International Placement is demand driven and employers are identified
- Demands for trades are taken from International employers
- International partner selects curriculum and TSP that will be responsible for delivery of training
- Hiring of Overseas Employment Promoters (OEP)

6.2.3   Generation Program
- Demands are taken from employers for their entry level roles
- Training cost, per candidate, is aligned with the employer
- MOU is signed with potential employers for hiring of candidates after training
- Advertisement is rolled out in newspaper for hiring of TSPs
- Competitive bidding is followed for procurement of TSPs

6.2.4   Business Development
- Developing Corporate Sector Pipeline
- Preparation of MOU and agreement with the Company

- MOU / agreement signing with partner(s) after having it reviewed internally with our stakeholders and the legal counsel
- MOU / agreement signing

7. Monitoring and Evaluation Department

7.1 In-Scope for the BSS

7.1.1 Development of Operational Work Plans, M&E Business Rules, Guidelines & Tool Kit

- Review Contract/Appendix provided by E-Procurement
- TSP to Submit Inception Report (Center profile & Instructor Profile) X Days prior to class commencement date
- TSP will submit Trainee profile directly in System
- Review Inception Report submitted by TSP
- Share Feedback / Recommendation to incorporate change in Inception Report to TSP through email
- PRN will be generated by M&E and Invoice will be generated by Finance Department
- Update / Share feedback on Business Rules
- Update Monitoring Tool Kit Accordingly
- Prepare & Finalization of Monitoring Business Rules & Payments

7.1.2 Scheme Data Management

- Download trainee information from System added by TSP
- Integration with other Organizations using web services (NADRA, BISP, EOBI, PBTE, TPM, and PBT)
- AMS data access via web services will be provided to TPMs
- Submission of 3rd Party Monitoring Report D through BSS
- Evaluate Monitoring Report submitted by 3rd party
- Share latest status of trainees after applying monitoring business rules with TSP and update trainee status in System
- Send response against trainee status to TSP
- Evaluate TSP response against trainee and update in MIS (if required)
- Track progress against different indicators by fetching required data from MIS.
- Prepare reports against different indicators to be shared with Donor's, Management and Internal Departments.

7.1.3 Field Monitoring

- 3rd Party to develop Visit Plan / Examination Monitoring Plan using BSS Application
- PSDF View Visit Plan developed by TPMs
- Make Group / Team to Surprise Visit TSP Wise
- Conduct Regular / Surprise Field Visits
- Prepare Visit Report TSP Wise
- Compare Report with 3rd Party Evaluation Company Reports
- Submit Final Monitoring Report
- Share List of issues with TSP, TPM & PBTE to rectify them linked with Complaint Handling Management.

7.1.4 Complaint Handling Management

- TSP Complaint management System to be develop or can be used external System within the BSS

- Send complaint to Call Center, Assign Account Manager and Email Notification to relevant to TSP / TPM through Email
- Follow-up complaint from relevant stakeholder(s) until resolution
- Update Complaint Status in BSS Application

7.1.5 Result Based Payment Management for TSP

- Evaluate TSP Invoice supporting documents (Scrutiny of Stipend Registers, Uniform / Bag Receiving Documents)
- Compare TSP Progress Report with 3rd Party Monitoring Report
- Feed findings of Reports in System
- Generate Payment Recommendation Note based on TPM & TSP reports as per business rule
- Telephonic verification of stipend disbursement through call center (if required)
- Exam Result Cross Verification by certifying body (PBTE / International Certificate) by sharing exported data in agreed formats.
- Update Training Completion Status in System
- Update Exam Result in System
- Generate Final PRN on basis of TCR & Completion Documents
- Record/ log Management of Invoice Processing & Forwarding
- Forward Payment Recommendation Note & all relevant documents to Finance Dept. for payment processing through the System

7.1.6 Result Based Payment Management – Other Stakeholders

- Generate Payment Recommendation Note based on deliverables
- Maintenance of Invoice
- Forward Payment Recommendation Note with Invoice to Finance Dept. for payment processing

7.1.7 Performance Management

- Evaluate TPM Monthly Report
- Identify & Address the performance GAPs to mitigate the non-compliance issues
- Share identified GAPs of TSP through. Email / Letter / System
- Send TSP response to TPM for verification
- Monitoring of TPM through Field visit and receive feedback from TSP
- Feed the KPI of TSP(s) based on TPM Reports & PSDF Monitoring Team input in Performance Evaluation Framework in assistance with TPM in System
- Generate scheme/trade wise TSPs ranking in System
- Share ranking of TSP(s) with PSDF management & PD for further consideration in future contracting in System
- Share scheme/trade wise performance with live TSP(s) through System
- M & E arrange meeting with TSP and resolve objection / reservations

7.1.8 Testing and Certification

- After x- days of commencement of classes Send alert to PBTE to download Trade & Trainee data from System
- System will create PBTE compatible DB File and posting to PBTE via email
- Gazette Received in Soft and Hard Copy – Local Testing Bodies (PBTE)
- Receive Training Completion Certificate from all TSPs in PSDF standard format.

- Receive Gazette along with copies of certifications from other local and International Testing bodies (TSP & Testing Bodies International Certificate) and verify with information already available in the system

7.1.9 Track, Monitor & Evaluate Scheme / TSP Progress

- Track & Monitor the Scheme / TSP Progress through System
- Send alert to TSP for timely submission of reports and accurate data through System
- Review reports submitted by TSPs
- Reporting Scheme / TSP Progress to PSDF Management through System

7.1.10 Stipend Calculation and Disbursement Process

- Enter Trainee Data in System
- NADRA Verification / Verisys Process (through Web-services)
- TPM will submit visit report and month-end report through AMS system
- AMS system imports master sheet from BSS.
- TSP will also submit its Report
- Stipend Evaluation Report
- Stipend Dispatched to disburse payment channel
- Stipend to be disbursed via BSS System (Integration with MFS)
- Share Stipend disbursement report with Call Center (Telenor)
- Call center (Telenor) will perform verification and provide updated report back to PSDF
- Import Telenor Report in BSS system to update Status of Stipend along with Transaction id

7.1.11 Employment & Placement by TSP

- Placement by TSPs under standard training programs
- After class completion TSP will do employment as per contract and provide data in BSS system (30 days)
- Call Center will access BSS system to verify employment and update results
- Verification of Employment through CC / Pay Role / Physical.
- BSS will generate Invoices / PRN against the no of employees get employment
- Employment payment to TSP

7.2 Informative Information (Out of Scope)

7.2.1 Engagement of Third-Party Stakeholders

- Share the Scheme TSP Trade & Training Level Data
- Resource mobilization by PD Dept.
- Contract execution with TSPs
- M & E review report shared by external stakeholder(s)

7.2.2 Schemes Commencement

- Receive Signed Contract & Appendix Copy from PD/Procurement Department or Download from MIS Application
- Conduct TSP Orientation Session and share Business Rules, Monitoring Guidelines and MIS Credentials) via email
- Capacity Building of TSP and TPM
- Receive "Request to Proceed" from TPM (If applicable)

- Send Instruction to TPM for Center Inspection (if applicable)
- Conduct center inspection through TPM firm
- Issue "Notice to proceed" (NTP) to TSP to start training

7.2.3 Field Monitoring

- Field monitoring to be done out of the system and should be integration into BSS

7.2.4 Development of Bidding Document /Contract

- Prepare / update Scope of work, Evaluation Criteria etc. for bidding document / contract for TPM

8. Finance Department

8.1 In-Scope for the BSS

8.1.1 Past years expenditure trends and statements

8.1.2 Program Budget

- Receive Data for Scheme Working from PD Dept.
- Make Draft Sheet Schedule A of Budget
- Incorporate M & E draft budget in schedule A
- Incorporate M & C Budget Draft in Schedule A
- Incorporate Placement & Partnership Budget Draft in Schedule A
- On request, Share estimate budget with C & M Mgr. for next year marketing through DMS Application
- Perform Variance Analysis

8.1.3 SAP Invoice Management

- Share Soft Copy of Appendix of Signed Contract through System
- Prepare Invoice Pattern draft and PO as per agreed rules
- Review Invoice Pattern Draft and PO as per SAP rules
- Create PO using SAP existing System
- Send Invoice Pattern to PD through DMS Application

8.1.4 Program Cost Payment Processing

- Receive appendix of signed contract
- Create PO using SAP existing System
- Invoice Auto Preparation (After integration of SAP & MIS App.)
- Prepayment Verification
- Posting Record in SAP System
- Prepare Cheque through existing SAP Application
- Signing of Cheque & Voucher by CFO
- Dispatch Cheque to TSP
- Income Tax Deposit / Filing Returns / Reports
- Report to share with CFO & COO

8.1.5 Financial Reporting – Regular

8.1.6 Financial Reporting – On Request

8.1.7 Finance Department Output

- BSS to calculate "Cost Bench Marking"

- PSDF Annual Budget

- Non-Program Budget

- Program Budget

- Skill Development Program (TA)

- CAPEX Budget

- OPEX & CAPEX Payment Processing

- Budget Spending

- Invoice Management through existing SAP system

- Financial Reporting

- Consolidated Expense Management

- SAP System Generated Reports

8.1.8 PSDF Other information

- Types of the cost (Stipend, Training Cost, Uniforms or bags)

- Type of invoices (Regular Monthly Invoices, Final-1 Completion, Final-2 Employment & placement

8.2 Informative Information (Out of Scope)

8.2.1 Finance Departments - Inputs

- Information about any new requirements

- Business Financial Plan

- B.O.D Instructions

- Approved Deliverables

- Approved POs

- Approved Items budget

- Trial Balance

8.2.2 Budget Calendar

- Plan & Organize Budget Activities

- Make Budget Calendar as per list of activates along with templates

- Share approved Budget Calendar with All the department

- Monitor the compliance of departments with budget calendar

8.2.3 Skill Development Program Budget (TA)

- Strategic & Business Development Budget with Finance Department after approval of activities by CEO (through DMS App) shared by Strategic and Business development department

- CFO download Strategic & Business Development Budget file from DMS Application and Review Budget

- Share Budget Draft to CEO for approval through DMS Application

9. Internal Audit (IA) Department

9.1 In-Scope for the BSS

9.1.1 Past Trends & Statements

Past years expenditure trends and statements

9.1.2 User right & authentication

User right & authentication mechanism along-with respective logs

9.1.3 ISO 27001

BSS should comply with the ISO 27001

9.1.4 Communication Encryption

Communication in transit should be encrypted for both inter or intranet.

9.1.5 Password Encryption

Passwords should be encrypted, and two factor authentication controls should be part of the security features as the data input will be a part of process from both intra and inter users.

9.1.6 Firewall Rules

Firewall rules should be implemented to secure the system from unauthorized intruders.

9.1.7 Backups and archives

Backups and archives should be available. Online data should be retained as per the regulatory requirement. Further the archive should restore in readable format.

9.1.8 Future Data Migration

In future if the Company wants to migrate the data to cloud. Local cloud should be considered over international cloud because of the data protection at national level.

9.1.9 TSP Tracking

Complete track of the TSP should be available in system for AGP auditors.

9.1.10 Logs and reconciliations

Logs and reconciliations should be available to review every input and changes in the system.

10. Marketing Department

10.1 In-Scope for the BSS

10.1.1 Advertisement Directory Management and Notification Module

10.1.2 Email Communication and Notification Template Modification.

10.1.3 HSS Campaign, Events and Roadshows Management,

- Creation, Calendar view, Notification (Email, SMS etc.) and Event Feedback form (Mobile Friendly) etc.
- Voucher based Enrolment & CNIC enrolment Tracking

10.1.4 HSS Campaign, Events and Roadshows Management,

- Creation, Calendar view, Notification (Email, SMS etc.), Partner Attendance Management and Event Feedback form (Mobile Friendly) etc.

10.1.5 PSDF Website integration

- Integration with the website portals (in development).
- All the Trainee, Employer/PSP and TSP data available on the website should be integrated with BSS (bi-directional).
- Data migration from website to BSS. BSS will be the sole databank.

10.1.6 Inbuild CRM & CEMS for the TSPs, Trainees and Internal users for Contact Center

- Issue/complaints/feedback Tracking and Management
- Leads Management
- Inbound and Outbound Calls logging and Integration
- Verification Surveys
- Track Life cycle of trainee from enrolment to employment

10.2 Informative Information

10.2.1 Current CRM related Details

- As of now PSDF CRM has been developed by 3rd party Contact Center partner
- We would want our BSS to be capable for integration with existing CRM and Capture data for Contact center

11. TSP's (External Stakeholder)

a. TSPs, TPMs and other vendors will have their own logins into BSS system

b. TSP will generate invoice from BSS system under his login against the PO/Contract

c. TSP to add Trainee data in BSS system after complying with eligibility criteria, taking thumb impression that will be used to verify later at TSP center by TPM

d. TSP will be informed via Email Notifications

12. Business Support System (BSS) Key Objectives

12.1 BSS web services / API based Integrations with all possible vendors

a. PSDF website to made Announcement and Press Releases

b. SAP Application

c. E-Tendering / E-Procurement Portal

d. Placement / Employment Portal

e. Bio-Matric Attendance

f. Mobile version integration for Trainees and TSPs

g. Other Organizations (NADRA, BISP, EOBI, PBTE, TPM, and PBT)

h. Integration with Outlook/Exchange

i. System Open API Gateway

j. Complains Ticketing system at Call Center

k. Geo Tagging to locate the address of the testing center

l. CRM - Real time view of CRM Data, Live screen monitoring/dashboard

m. Social Media (WhatsApp, Facebook, Messenger, You-Tube, Twitter and SMS)

All above integrations would have dual functionality of being Live and Dynamic as well as File Import/Export

12.2 ROSI Calculation

a. End to End record keeping of Training and Program Journey to calculate "ROSI" (Return on Skills Investment) based on known Data Segmentation

b. Capability to calculate "CTM" (Cost per Trainee per month) based on contractual, enrolled, completed, graduated and generating income

c. Salary / Income Generation Record Management (formal, self-employment & Productivity improvement)

d. BSS to calculate "Trade wise ROSI"

12.3 Dashboard Management

a. Dynamic Dashboard with latest status of activities – Multiple Users controlled view

b. Display Figures & graphs of major Targets and Milestones

c. Dashboard must display Contract to Completion Ratio or Contract to Graduate Ratio

12.4 Business Rules Configuration Panel (Customizable)

a. Compliance and Business Rules Management

b. PSDF Monitoring Rules

c. Configurable Workflow Engine: System to be adaptable and flexible to accommodate new features and changes in process

d. Business Rules need unique Ref. No

12.5 PSDF Organization Process and Policy Management (Document upload & download using DMS)

a. Policies, Procedures, Standards, SOPs

b. Concepts, Controls, Compliance and Configurations Management

c. Cross functional knowledge management

d. Documentation Control though Structured Coding and naming convention / Taxonomy

e. Achievements / Completed Projects, Historic Data and Lesson Learned

12.6 Trade & Cost Bench Marking (Regular and Cost Sharing Model by Business Development Department)

12.7 Inbuild Customer Relation Management System

integration with the existing CRM

Data Transfer (Import/Export)

Issue Logging and Tracking

12.8 Engagement Management

a. **End-to-End Client Management** and TSP Communication

b. **Auto notifications** to TSPs and others to overcome the shortcoming issues

c. Marketing Support

d. **CRM** - Engagement Tool (for emails / Notices)

12.9 Performance Management

a. **Monthly, Quarterly and Annual Performance management** (Internal & External)

b. Internal & External Stakeholder's **KPI management**

c. **TSPs Performance Evaluation** and Ranking like drop off ratio, Technical expertise

d. TSP performance in Pre-Qualification process (orientation & awareness session)

12.10   Business Analytics Support for Executive Decision Making

a. **Systematic analysis and statistics** to make predictions to identify upcoming potential schemes based on the Data Segments

b. **Strategy and forecasting** for Partnership and Placement

c. Internal Research based on **Historic information and Knowledge base**

d. Budgeting and Forecasting Training Calendar

e. Auto Monitoring Tool Kit for **evaluation of TPM work and progress**

f. **Quarterly Financial Forecast** to timely funds release

g. Exam Monitoring Plan

12.11   Processes and Operations Automation (Objective: "Zero Manual Interactions")

a. Fully capable to Manage PSDF Enterprise Operations

b. Whistle-blower system based on auto eligibility checks

c. User friendly error prompts

d. Resource Assignment and Work Authorization System

e. Automated Email/Notifications module

f. Multiple user Approval/Maker Checker Process

(a)   Each process should be governed by Maker Checker(s) process there will be a single maker and can be Multiple Checker and Approver based on Process criticality.

g. Auto Verification and Data Validation of Trainee List based on business rules and policies of the PSDF

h. Exam Gazette in BSS, to display over PSDF website *(as and when needed)*

i. All kind of Requisition approvals and Payments approval through BSS system with current status and approval notes

j. Integrated Accounts system with Inbuilt invoicing reconciliation and tracking system

k. Generates Procurement Note

l. Auto Generate Payment Recommendation Note/Invoice (monthly, Final 1 - Completion, Final-2 Employment, Certification) based on the comparison of TPM & TSP reports as per business rule

m. PO and invoicing will be generated in BSS and SAP will be only used for Debit and Credit

n. Financial posting into SAP for the payments

o. All departmental interfaces will have Alerts and Triggers, to show the list of pending tasks on their side

p. TSP and TPM can view updates, reports published by M&E

q. Share Performance Report and ranking of TSP through system

12.12 Contracts Management (Document upload & download using DMS)

a. Contracts Awarded to TSP, PSP, OEP, TPM and other vendors

b. Contracts Execution Record and Revision Management

c. Contracts Repository

d. Vocational Training Service Contracts

12.13 Master Data Management

a. Master data for Trainees, Training Service provides, Placement Service Provided, Skills (Campaigns) Trades and there Financial/Account/GL [SAP] information the only shell be maintained in the System.

b. BBS will maintain Master-Data. Hence, Record each and every activity within PSDF related to Trades, Schemes and Trainings to produce required analytics and auditing procedures at later stage

c. All documentation should have unique document reference no which can be pulled from system at any point of time through Search Tool

d. Transfer of existing MIS Data (Legacy System Data Transformation) after cleansing and DB mapping

e. Record Log Frame provided by Donner, External Research/Studies and Sector Surveys Reports provided by 3rd Parties (Partners) to design/add/update scheme

f. Existing Pool of the pre-qualified and qualified TSPs, Employers for Placement, Overseas Employment Promoters (OEP), distributors, vendors, and 3rd party evaluation firm

g. Registration of preproposal conference and Trainees through BSS system

h. Record of Trainings and placement by TSPs & PSP along with employment letter & Duration

i. System should be capable to pull out Trainee detailed information based on CNIC

12.14 Dynamic Reporting Module (Configurable, Single click Reports and Customized Reports

Internal & External Stakeholder Reports

a. Monitoring & Evaluation Reports provided by 3rd parties (TSP, PSP & TPM)

b. Internal Monitoring and Evaluation Reports

c. Internal Audit Reports

d. Field Monitoring Reports (TSP Wise)

e. Analysis Reports and statistics for the Donors / Management

Work Performance Reports

a.   Month/Quarter/Annual Progress Reports

b.   Performance Variance Report

Financial Reporting

a.   Monthly Actual vs. Budget Reports

b.   Quarterly/Annual Financial Reports / Statements

c.   Financial Progress Reports

d.   Financial Variance Report

e.   Value Earn Report

f.   CAPAX Budget Report

g.   Income Tax Deposit / Filing Returns / Reports

h.   SAP System Generated Reports

i.   Management Cost Evaluation Sheet & Report

j.   Monthly Accounts Reports

k.   Operational Budget Sheet & Analysis Report

l.   Fully Loaded Cost Report

12.15   System and Data Integrity

a.   BSS Multilingual System

b.   Direct visibility & transparency for Donors

c.   Critical Complains and Financial information only visible to Finance and Program Design

d.   User's activities log / Audit Trails / Accountability (logged-in, added, updated, delete, logged-out etc.)

e.   Audit Trail of both BSS interface and Data base is required

f.   System Performance Audit and Control

g.   Centralized database system

h.   System should not chock because of historic audit trail

12.16   User Management

a.   Group and company will also be added as User of the system

b.   Some of the Basic functionalities will be default set to user type on creation but other specific will be granted with permission of HOD

c.   User can create other users down the hierarchy, but based on the permission granted from HOD

d.   Non-of-Users has access to DB other than DB admin,

e.   None of value can be changed from DB

f.   Only DB structure can be enhanced based on multiple approvals

12.17   System and Data Security

g.   Data at rest or in motion (Active) must be encrypted

h.   Configurable User Access Control (Who can see or do what)

i.   Multi-level Tracing Management

j.   password-protection

12.18   Project Deliverables

  a.   Project Plan with Details (Resources and Timelines)

  b.   Change Control Process (forms, templates / approval mechanism, flow)

  c.   Complete SRS/FRS/DFDs/Architecture/Design/Logical DB Design and Physical DB Design Documents of BSS (Approved from all Business Unites).

  d.   Existing Data Migration (reflection of this data for View only and Reporting purpose)

  e.   UAT Test Plan with Test Cases (Positive/Negative) after Business Endorsement

  f.   Go-Live

  g.   Parallel Run

  h.   6 Months of Free of Cost Post Project Support including CRs & Bug fixing (Compiling to the SLA Mentioned in the RFP)

  i.   Source code of BSS Handover to the PSDF along with Technical documentation of the Source Code, Web services etc.

  j.   BSS User Manual (Department wise and Function wise) and System Technical Manual would be the part of BSS delivery

  k.   Firm to provide at least 1 years of Support and Service contract (chargeable after completion of FOC support of 6 months). Separate SLA would be signed for this.

12.19   BSS System Go-Live Strategy

  a.   Parallel Testing along with existing MIS

  b.   System will have parallel run with existing MIS till closure of last scheme (and migrate that scheme data into BSS)

  c.   Once BSS is signed off, Live system will have all the schemes data, all the new Scheme will be executed on BSS.

  d.   Archived Legacy Data will only be transferred to new system for Analytics

13.   Guidelines for the System Development

13.1 Business & System Workflow Design

  a.   Bidder shall draft the workflow design (DFD), workflow configuration business processes

  b.   Define the fundamental actions that must take place in the software in accepting and processing the inputs and in processing and generating the outputs, including:

  (a)   Validity checks on the inputs;

  (b)   The exact sequence of operations;

  (c)   Responses to abnormal situations, including Communication facilities and Error handling and recovery;

  (d)   Effect of parameters;

  (e)   Relationship of outputs to inputs, including Input/output sequences and Formulas for input to output conversion.

  To partition the functional requirements into sub-functions or sub processes appropriately.

13.2 Policies

Specify policies that can impact on the system or policies that are being enforced for certain tasks.

13.3 Data Dictionary

The complete data dictionary will be required for further reference.

13.4 Data Reporting and Analysis

Data reporting module is a key to business which needs to be specified and explained in detail which should include following

- Each Report Search Criteria
- Data Export Capability
- Supporting Files types

13.5 System Log and Audit Trail Analysis

System log analysis information, details of error codes and their description will be part of final system manual

13.6 Document Management

Specify documents that will be uploaded into the system how will be stored how admin and authorized user can access these documents.

13.7 Data Archiving and Retention

Specify data archiving and retention policies and procedure

13.8 Operational & System Manual

Specify the normal and special operations required by the user such as:

- The various modes of operations in the user organization (e.g., user-initiated operations);
- Periods of interactive operations and periods of unattended operations;
- Data processing support functions;
- Backup and recovery operations.

13.9 Licenses

Licenses that are required to complete this project should be catered under the project cost and shall be mentioned separately in the Financial Proposal

13.10   Integrations

Specify all the integration points and methods with details, this portion will also include all the web service information in case of 3rd party integration is required user will consult this document for successful integration.

13.11   Security

Specify all the security requirements,

13.12   Encryption

Specify Encryption algorithm needed for API layers and user authentication

13.13   User Rights and Role Management

This is the main part where flexibility is required where we can allow one or multiple users to read/write or add & change rights etc.

13.14   Different Interfaces

13.14.1   Scheme Launch Interface

Include Integration with Other System, Import Definition and Most Importantly Self-definition of the Scheme that was designed with Multilevel Approval

13.14.2   System Interfaces

The bidder will list each system interface and identify the functionality of the software to accomplish the system requirement and the interface description to match the system.

13.14.3   User Interfaces

Specify the following:

- **The logical characteristics of each interface between the software product and its users.** This includes those configuration characteristics (e.g., required screen formats, page or window layouts, the content of any reports or menus, or availability of programmable function keys) necessary to accomplish the software requirements.

- **All the aspects of optimizing the interface with the person who uses maintain or provide other support to the system.** This may simply comprise a list of do's and don'ts on how the system will appear to the user.

A style guide for the user interface can provide consistent rules for organization, coding, and interaction of the user with the system.

13.14.4 Hardware Interfaces

Specify the logical characteristics of each interface between the software product and the hardware elements of the system. This includes configuration characteristics (number of ports, instruction sets, etc.). It also covers such matters as what devices are to be supported, how they are to be supported, and protocols.

13.14.5 Software Interfaces

Specify the use of other required software products (e.g., a data management system, an operating system, or a mathematical package), and interfaces with other application systems (e.g., the linkage between an accounts receivable system and a general ledger system).

For each required software product, specify:

- Specification number;

- Version number;

For each interface, specify:

Specify the purpose of the interfacing software as related to this software product;

- Definition of the interface in terms of message content and format.

13.14.6 Communications Interfaces

Specify the various interfaces to communications such as local network protocols. Based on what, system will communicate internally

13.14.7 External Interfaces

Specify all the external interfaces while application is communicating or using external applications or features from the web etc.

13.15 Constraints

List each of the factors that affect the requirements stated in the RFP.

13.15.1 Memory Constraints

Specify all applicable constraints, assumptions, dependencies and limits on primary and secondary memory

13.15.2 Performance/Capacity Management Constraints

Specify both the static and the dynamic numerical requirements placed on the software or on human interaction with the software as a whole.

Static numerical requirements may include the following:

- The number of terminals to be supported

- The number of simultaneous users to be supported

- Amount and type of information to be handled

- the amount of data to be processed within certain time periods for both normal and peak workload conditions.

13.16 Technology Specific Development

Currently, PSDF is operating on Microsoft technologies and our focus would be to continue with the development on .NET based application and its related modules. However, bidder can use different plugins for integration of modules. If licenses are required bidder will add 3 Year cost of those licenses within the head of **"Total Project Cost"** of the project shared in financial proposal.

13.17   Payment Plan

Sr.	Deliverables Milestone	Percentage Amount
2	Project Plan, Complete SRS/ FRS/ DFDs/ Architecture/ Design Documents of BSS. Each individual document to be signoff from PSDF	5%
3	Signed off Test Plan & Test Cases from PSDF	10%
4	Existing Data Migration in agreed formats through import utility (reflection of this data for View only and Reporting purpose)	10%
5	Application Development & UAT	30%
7	Successful Go-Live, deployment of application on PSDF servers (including PSDF Signoff)	20%
8	BSS User Manual (Department wise and Function wise) and System Technical Manual would be the part of BSS delivery Signed off completion from PSDF Source code of BSS Handover to the PSDF property along with Technical documentation of the Source Code, Web services, etc. Signed off delivery from PSDF	15%
9	6 Months of Free of Cost Post Project Support including CRs	10%

Important Note

Workflow diagram & ERD including Sequence and design optimization of the Processes and Procedures will be exercised and finalized during the detailed analysis conducted by the selected Firm / Organization, who will develop and implement this BSS.

In case instance where a business process may change during the course of software development this will be notified through a formal CR as per the change control process shared by the development firm/organization and should be incorporated by the development firm/organization with no impact on the project cost.