



KHYBER PAKHTUNKHWA TEVTA
TECHNICAL EDUCATION & VOCATIONAL TRAINING AUTHORITY
E-8, Near Hajj Complex, Phase 7, Hayatabad, Peshawar



REQUEST FOR PROPOSAL

FOR

**DEVELOPMENT AND IMPLEMENTATION OF THE INTEGRATED TRAINING
INSTITUTES ERP AND STUDENT SPECIFIC ERP– ODOO**

Bid Reference Number:

KP-TEVTA/Proc/ERP/2026/01

Last Date/Time for Submission:

September 16, 2026, at 11:30 AM

Bid Opening Date/Time:

September 16, 2026, at 12:00 PM

TABLE OF CONTENTS

SECTION-01. LETTER OF INVITATION.....	1
SECTION-02. INSTRUCTIONS TO CONSULTANTS.....	3
SECTION-03: TECHNICAL PROPOSAL - STANDARD FORMS.....	14
SECTION-04. FINANCIAL PROPOSAL - STANDARD FORMS	23
SECTION-05: TERMS OF REFERENCE (TOR).....	27
SECTION-06: GENERAL CONDITIONS OF THE CONTRACT.....	36
SPECIAL CONDITIONS OF CONTRACT.....	45
(INTEGRITY PACT)	46
CONTRACT	47
Functional Requirements Specification	50

SECTION-01. LETTER OF INVITATION

SECTION-01. LETTER OF INVITATION

SECTION-01. LETTER OF INVITATION

LETTER OF INVITATION

Invitation/File No: **KP-TEVTA/Proc/ERP/2026/01**

Location: KP-TEVTA Head Office Sector E-8, Hayatabad, Peshawar,

Dear Sir/Madam.:

1. The *KP-TEVTA* (hereinafter called "Procuring Entity") now invites proposals to provide the following consulting services:

**. "DEVELOPMENT AND IMPLEMENTATION OF THE INTEGRATED TRAINING INSTITUTES
ERP AND STUDENT SPECIFIC ERP– ODOO"**

More details on the services are provided in the RFP Documents.

2. This Request for Proposal (RFP) is for all experienced & eligible consultants/firms.
3. A firm will be selected under the Single Stage Two Envelope Procedure with Quality and cost based Selection (QBS) System and criteria described in this RFP, in accordance with the KPPRA Rules 2014.
4. The RFP includes the following documents:

Section 1 - Letter of Invitation

Section 2 - Instructions to Consultants (including Data Sheet)

Section 3 - Technical Proposal - Standard Forms

Section 4 - Financial Proposal - Standard Forms

Section 5 - Terms of Reference

Section 6 - Conditions of Contract

5. Please inform us in writing at the following address *KP-TEVTA Head Office Sector E-8, Hayatabad, Peshawar*

Yours sincerely

Director Procurement

Khyber Pakhtunkhwa Technical Education & Vocational Training Authority (KP-TEVTA)

KP-TEVTA Head Office, Peshawar

Phone: 91-9219143

SECTION-02. INSTRUCTIONS TO CONSULTANTS/Firms

INSTRUCTIONS TO CONSULTANTS

1. Definitions

- a) "Procuring Entity (PE)" Khyber Pakhtunkhwa Technical Education & Vocational Training Authority (KP-TEVTA)
- b) "Consultant" means a professional who can study, design, organize, evaluate and manage projects or assess, evaluate and provide specialist advice or give technical assistance for making or drafting policies, institutional reforms and includes private entities, consulting firms, legal advisors, engineering firms, construction managers, management firms, procurement agents, inspection agents, auditors, international and multinational organizations, investment and merchant banks, universities, research institutions, government agencies, nongovernmental organizations, and individuals. Here the consultant means the firm providing the mentioned services to KP-TEVTA.
- c) "Contract" means an agreement enforceable by law and includes Conditions of the contract.
- d) "Data Sheet" means such Part of the Instructions to Consultants that is used to reflect specific assignment conditions.
- e) "Day" means calendar day including holiday.
- f) "Government" means the Government of Khyber Pakhtunkhwa.
- g) "Instructions to Consultants" (Section 2 of the RFP) means the document which provides shortlisted Consultants with all information needed to prepare their Proposals.
- h) "LOI" (Section 1 of the RFP) means the Letter of Invitation sent by the procuring Entity to the Consultant.
- i) "Proposal" means the Technical Proposal and the Financial Proposal.
- j) "RFP" means the Request for Proposal prepared by the procuring Entity for the selection of Consultants.
- k) "Terms of Reference" (TOR) means the document included in the RFP as Section 5 which explains the objectives, scope of work, activities, tasks to be performed, respective responsibilities of the procuring Entity and the Consultant, Payment terms and exacted results and deliverables of the assignment.

2. Introduction:

- 2.1 The Procuring Entity named in the Data Sheet will select a consulting firm/organization (the Consultant), in accordance with the method of selection specified in the Data Sheet.
- 2.2 The eligible Consultants are invited to submit a Technical Proposal and a Financial Proposal, as specified in the Data Sheet. The Proposal will be the basis for contract negotiations and ultimately for a signed contract with the selected Consultant.
- 2.3 Consultants should familiarize themselves with rules / conditions and take them into account while preparing their Proposals.
- 2.4 Consultants shall bear all costs associated with the preparation and submission of their proposals and contract negotiation. The Procuring Entity reserves the right to annul the selection process at any time prior to contract award, without thereby incurring any liability to the Consultants.
- 2.5 Procuring Entity may provide facilities and inputs as specified in Data Sheet.

3. Conflict of Interest

- 3.1.1 Consultants are required to provide professional, objective, and impartial advice and holding the Procuring Entity interest Paramount. They shall strictly avoid conflict with other assignments or their own corporate interest. Consultants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of the Procuring Entity, or that may reasonably be perceived as having such effect. Failure to disclose said situations may lead to the disqualification of the Consultant or the termination of its Contract.
- 3.1.2 Without limitation on the generality of the foregoing, Consultants, and any of their affiliates, shall be considered to have a conflict of interest and shall not be recruited, under any of the circumstances set forth below:
 - (i) A consultant that has been engaged by the procuring entity to provide goods, works or services other than consulting services for a project, any of its affiliates, shall be disqualified from providing consulting services related to those goods, works or services. Conversely, a firm hired to provide consulting services for the preparation or implementation of a project, any of its affiliates, shall be disqualified from subsequently providing goods or works or services other than consulting services resulting from or directly related to the firm's consulting services for such preparation or implementation.
 - (ii) A Consultant (including its Personnel and Sub Consultants) or any of its affiliates shall not be hired for any assignment that, by its nature, may be in conflict with another assignment of the Consultant to be executed for the same or for another Procuring Entity.
 - (iii) A Consultant (including its Personnel and Sub-Consultants) that has a business or family relationship with a member of the Procuring Entity's staff who is directly or indirectly involved in any Part of (i) the preparation of the Terms of Reference of the Assignment, the selection process for such assignment, or (iii) supervisions of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved.

Conflicting Relationship:

3.2 Government officials and civil servants may be hired as consultants only if:

- (i) They are on leave of absence without Pay;
- (ii) They are not being hired by the Entity they were working for, six months prior to going on leave; and
- (iii) Their employment would not give rise to any conflict of interest.

4. Fraud and Corruption:

It is Government's policy that Consultants under the contract(s), observe the highest standard of ethics during the procurement and execution of such contracts. In pursuit of this policy, the Procuring Entity follows the instructions contained in Khyber Pakhtunkhwa Public Procurement Rules 2014 which defines:

"corrupt and fraudulent practices" includes the offering, giving, receiving, or soliciting, directly or indirectly of anything of value to influence the act of another Party for wrongful gain or any act or omission, including misrepresentation, that knowingly or recklessly misleads or attempt mislead a Party to obtain a financial or other benefit or to avoid an obligation;

Under Rule 44 of KPPRA 2014, "The PE can inter-alia blacklist Bidders found to be indulging in corrupt or fraudulent practices. Such barring action shall be duly publicized and communicated to the KPPRA. Provided that any supplier or contractor who is to be blacklisted shall be accorded the adequate opportunity of being heard".

5. Integrity Pact:

Pursuant to section 16(2)&(3) of KPPRA Act 2012 Consultant undertakes to sign an Integrity Pact in accordance with the prescribed format attached hereto (Annex- A).

6. Eligible Consultants:

This RFP is open to all experienced and eligible consultants/Firms.

7. Eligibility of Sub-Consultant:

A trainer may associate with only one consultant, association with more than one consultant would not be allowed.

8. Only One Proposal:

Consultants can only submit one proposal for a single package. If a Consultant submits in more than one proposal, such proposals shall be disqualified. Participation of the same Sub Consultant, including individual experts, in more than one proposal, is not allowed.

9. Proposal Validity:

The Data Sheet indicates the Proposal's validity that shall not be more than 90 days. During this Period, Consultants shall maintain the availability of Professional staff nominated in the Proposal. The Procuring Entity will make its best effort to complete negotiations within this period. Should the need arise; however, the Procuring Entity may request Consultants to extend the validity period of their proposals. Consultants who agree to such extension shall confirm that they maintain the availability of the Professional staff nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, Consultants may submit new staff in replacement, who would be considered in the final evaluation for contract award. Consultants who do not agree have the right to refuse to extend the validity of their Proposals.

10. Clarification and Amendment in RFP Documents:

- 10.1 Consultants may request for a clarification of contents of the bidding document in writing, and procuring Entity shall respond to such queries in writing within three calendar days, provided they are received at least eight calendar days prior to the date of opening of the proposal. The procuring Entity shall communicate such response to all Parties who have obtained RFP document without identifying the source of inquiry. Should the PE deem it necessary to amend the RFP as a result of a clarification, it shall do so.
- 10.2 The Procuring Entity may amend the RFP five days before the closing date by issuing an addendum/ corrigendum in writing. The addendum shall be sent to all Consultants and will be binding on them. Consultants shall acknowledge receipt of all amendments. To give Consultants reasonable time in which to take an amendment into account in their Proposals the Procuring Entity may, if the amendment is substantial, extend the deadline for the submission of Proposals.

11. Preparation of Proposals

- 11.1 In preparing their Proposal, Consultants are exacted to examine in detail the documents comprising the RFP. Material deficiencies (deviation from scope, experience and qualification of Personnel) in providing the information requested may result in rejection of a Proposal.

12. Language

The Proposal as well as all related correspondence exchanged by the Consultants and the Procuring Entity shall be written in English. However, it is desirable that the firm's Personnel have a working knowledge of the national and regional languages of Islamic Republic of Pakistan.

13. Technical Proposal Format and Content

- 13.1 While preparing the Technical Proposal, consultants must give Particular attention to the following:
 - (i) If a consultant considers that it does not have all the expertise for the assignment, it may obtain a full range of expertise by associating with individual consultant(s) and/or other firms or entities in a joint venture or sub- Consultancy, as appropriate. The international consultants are encouraged to seek the Participation of local consultants by entering into a joint venture with, or subcontracting Part of the assignment to, national consultants.
 - (ii) It is desirable that the majority of the key professional staff proposed to be Permanent employees of the firm or have an extended and stable working relationship with it.
 - (iii) Proposed professional staff/mentors/trainers must, at a minimum, have the experience indicated in the TOR, preferably working under similar geographical conditions.
 - (iv) Alternative professional staff/mentors/trainers shall not be proposed, and only one curriculum vitae (CV) shall be submitted for each position.
- 13.2 The Technical Proposal shall provide the following information using the attached Standard Forms (Section 3):
 - (i) A brief description of the consultant organization and an outline of recent experience on assignments of a similar nature. For each assignment, the outline should indicate, *inter alia*, the profiles of the staff, duration of the assignment, contract amount, and firm's involvement.
 - (ii) The list of the proposed staff/mentors / trainer's team by specialty, the tasks that would be assigned to each staff team member, and their timing (Section 3).
 - (iii) CVs of the proposed professional staff and the authorized representative submitting the proposal. Key information should include number of years working for the consultant and degree of responsibility held in various

- assignments during the last 5 (five years).
- (iv) Estimates of the total staff input (mentors, professional and support staff; staff time) needed to carry out the assignment, supported by bar chart diagrams showing the time proposed for each professional staff team member.
 - (v) A detailed description of the proposed methodology, work plan for performing the assignment, staffing, and monitoring of training, if the Data Sheet pacifies training as a major component of the assignment.
 - (vi) Any additional information requested in the Data Sheet.

13.3. The Technical Proposal shall not include any financial information.

14. Financial Proposals

14.1 The Financial Proposal shall be prepared using the attached Standard Forms (Section 4). It shall list all costs associated with the assignment. Alternatively, Consultant may provide their own list of costs. If appropriate, these costs should be broken down by activity. All activities and items described in the Technical Proposal must be priced separately; activities and items described in the Technical Proposal but not priced shall be assumed to be included in the prices of other activities or items. All the costs shall include government applicable taxes.

15. Taxes:

15.1 The Consultant shall be subject to all admissible taxes including KPRA, stamp duty, and service charges at a rate prevailing on the date of contract agreement unless exempted by the relevant tax authority.

16. Submission, Receipt, and Opening of Proposals

- 16.1 All the bids prepared in accordance with the instructions stipulated in the Standard Bidding Document must be submitted electronically via E-PADS (<https://kp.eprocure.gov.pk>). Manual submissions of the bids will not be accepted.
- 16.2 The bids will be opened electronically on the same day at 12:00 PM, in the presence of bidders or their authorized representatives who wish to attend the bid opening meeting at the below-mentioned address.
- 16.3 All the required documents shall be scanned and uploaded along with the bid on E-PADS (<https://kp.eprocure.gov.pk>)
- 16.4 Detailed terms & conditions, specifications, and other relevant information are available in the E-Bid Solicitation Documents on the EPADS portal: kp.eprocure.gov.pk
- 16.5 KP-TEVTA reserves the right to reject any or all bids at any stage of the bidding process as per prevailing KPPRA rules.
- 16.6 Only registered bidders on EPADS are eligible to participate in the bidding process.
- 16.7 Interested bidder must register via: <https://kp.eprocure.gov.pk/#/supplier/registration>.

17. Proposal Evaluation:

17.1 From the time the Proposals are opened to the time the Contract is awarded, the Consultants should not contact the PE on any matter related to its Technical and/or Financial Proposal. Any effort by Consultants to influence the PE in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result

in the rejection of the Consultants' Proposal.

Evaluators of Technical Proposals shall have no access to the Financial Proposals until the technical evaluation is concluded.

18. Evaluation of Technical Proposals

18.1 The evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Terms of Reference, applying the evaluation criteria, sub-criteria, and point system specified in the TOR. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it fails to achieve the minimum technical score indicated in the Data Sheet.

18.2 After the technical evaluation is completed, the PE shall notify in writing Consultants that have secured the Minimum qualifying marks, the date, time and location, allowing a reasonable time, for opening the Financial Proposals. Consultants' attendance at the opening of Financial Proposals is optional.

Financial proposals of those consultants who failed to secure minimum qualifying marks shall be returned un-opened.

19. Evaluation of Financial Proposal

19.1 Financial Proposals shall be opened publicly in the presence of the Consultants' representatives who choose to attend. The name of the Consultants and the technical scores of the Consultants shall be read aloud. The Financial Proposal of the Consultants who met the minimum qualifying mark will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. The Report will be uploaded on the EPADS.

19.2 The Evaluation Committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a Partial amount and the total amount, or between word and figures the formers will prevail. In addition to the above corrections, activities and items described in the Technical Proposal but not priced, shall be assumed to be included in the prices of other activities or items.

19.3 Quality and Cost Based Selection QCBS Method the lowest evaluated Financial Proposal (Fm) will be given the maximum financial score (Sf) of 100 points. The financial scores (Sf) of the other Financial Proposals will be computed as indicated in the TOR. Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + P = 1) indicated in the Data Sheet: $S = St \times T\% + Sf \times P\%$. The firm achieving the highest combined technical and financial score will be invited for negotiations.

20. Negotiations

20.1 Negotiations will be held at the date and address which will be communicated to the consultant. The invited Consultant will, as a pre-requisite for attendance at the negotiations, confirm availability of all Professional staff. Failure in satisfying such requirements may result in the PE proceeding to negotiate with the next-ranked Consultant. Representatives conducting negotiations on behalf of the Consultant must have written authority to negotiate and conclude a Contract.

21. Technical Negotiations:

21.1 Technical Negotiations will include a discussion of the Technical Proposal, the proposed

technical approach and methodology, work plan, organization and staffing, and any suggestions made by the Consultant to improve the Terms of Reference. The PE and the Consultants will finalize the Terms of Reference, staffing schedule, work schedule, logistics, and reporting. These documents will then be incorporated in the Contract as "Description of Services". Minutes of negotiations, which will be signed by the PE and the Consultant, will become Part of Contract Agreement.

22. Financial Negotiations:

- 22.1 If applicable, it is the responsibility of the Consultant, before starting financial negotiations, to contact the local tax authorities to determine the tax amount to be paid by the Consultant under the Contract. The financial negotiations will include a clarification (if any) of the firm's tax liability, and the manner in which it will be reflected in the Contract; and will reflect the agreed technical modifications in the cost of the services. Consultants will provide the PE with the information on remuneration rates described in the Appendix attached to Section 4 (i.e. Financial Proposal - Standard Forms of this RFP.

23. Availability of Professional staff/experts:

- 23.1 Having selected the Consultant on the basis of, among other things, an evaluation of proposed Professional staff, the PE expects to negotiate a contract on the basis of the Professional staff named in the Proposal. Before contract negotiations, the PE will require assurances that the Professional staff will be actually available. The PE will not consider substitutions during contract negotiations unless both Parties agree that undue delay in the selection process makes such substitution unavoidable or for reasons such as death or medical incapacity. If this is not the case and if it is established that Professional staff was offered in the proposal without confirming their availability, the Consultant may be disqualified. Any proposed substitute shall have equivalent or better qualifications and experience than the original candidate and be submitted by the Consultant within the period of time specified in the letter of invitation to negotiate.

24. Award of Contract:

- 24.1 After completing negotiations, the Procuring Entity shall award the Contract to the selected Consultant within seven days after a letter of acceptance or award has been issued. Procuring Entity shall publish on the website of the Authority and on its own website, if such a website exists, the result of the bidding process, identifying the bid through procuring identifying number, if any and the following information, evaluation report, form of contract and letter of award, bill of quantity or schedule of requirement, as the case may be. However, the procuring entity shall announce the final results of a bid evaluation giving justifications for acceptance or rejection of bids at least ten days prior to the award of a contract and place the same on its and authority website.
- 24.2 After publishing of award of contract consultant required to submit a Performance security at the rate indicated in data sheet.
- 24.3 The Consultant is expected to commence the assignment on the date and at the location specified in the Data Sheet.

25. Confidentiality:

Information relating to evaluation of Proposals and recommendations concerning awards shall not be disclosed to the Consultants who submitted the Proposals or to other Persons not officially concerned with the process, until the publication of the award of Contract. The undue use by any Consultant of confidential information related to the process may result in the rejection of its Proposal.

DATA SHEET

2.1	Name of the PE: <i>Khyber Pakhtunkhwa Technical Education & Vocational Training Authority (KP-TEVTA)</i> Name of the Assignment: <i>“DEVELOPMENT AND IMPLEMENTATION OF THE INTEGRATED TRAINING INSTITUTES ERP AND STUDENT SPECIFIC ERP– ODOO”</i> The method of selection: <i>Single Stage Two Envelope Method with Quality and Cost based Selection (QCBS)</i> <i>The Edition of the Guidelines is: KPPRA Rule 2014</i> The Name of the PE’s official (s): KP-TEVTA Director Procurement <i>Telephone # Tel: 091-9219143</i>
2.2	Financial Proposal to be submitted separately with Technical Proposal: <i>Yes, via EPADS</i>
2.3	Pre-Proposal Meeting: <i>N/A</i>
2.5	Input & Facilities provided by PE: <i>All Possible input & facilities will be provided by the PE.</i>
6	Eligibility of Consultant: <i>RFP is open to all the potential eligible bidders to apply as no EOI has been issued in this tender.</i>
7	Eligibility of Sub-Consultant: <i>No EOI has been issued, so there are no shortlisted consultants. A firm may associate with only one consultant, association with more than one consultant would not be allowed. No joint venture or sub-consultancy is allowed.</i>
9.1	Proposal Validity: <i>The proposal’s validity that shall be 90 days. The Procuring Entity may ask for an extension in proposal validity if required.</i>
10.1	Clarification and Amendment in RFP Documents: <i>Clarifications may be requested online via EPADS or from the office of Director Procurement not later than the date mentioned in the EPADS. The address for requesting clarifications is:</i> KP-TEVTA Head Office, Sector E-8, Hayatabad Peshawar
11.2	Preparation of Proposals: <i>Costing shall be made on the basis of deliverables as per TORs.</i>
12	Language: <i>The Proposal, as well as all related correspondence exchanged by the Consultants and the Procuring Entity, shall be written in English, However, it is desirable that the firm’s Personnel have a working knowledge of the national and regional languages of the Islamic Republic of Pakistan.</i>
13.1 (i)	Joint venture is not allowed.
13.1 (ii)	System for Selection of Consultant: <i>Quality and Cost-based selection (QCBS) as mentioned in the TORs section.</i>
13.1 (iii)	Proposed Staff/Trainers: <i>All the proposed staff/trainers may or may not be the employees of consultants as mentioned in the TORs but they must have signed a letter of intent or agreement on the format given in this RFP.</i>
13.1 (iv)	Professional Staff Experience: <i>As mentioned in the selection criteria in the TORs section.</i>
13.2	Technical Proposal: <i>Technical proposal shall be prepared on the guidelines mentioned in section-3 in this RFP.</i>
14.1	Financial Proposal: <i>The consultant shall prepare the financial proposal in the standard format in section- 4 of this RFP and must include all the cost including training, transportation, office, printing etc., and applicable taxes, duties etc., in the financial proposal. Cost shall be stated in local currency i.e., Pakistani Rupees.</i>

15.1	Taxes: <i>Amounts Payable by the PE to the Consultant under the contract to be subject to local taxation, stamp duty and service charges, etc.</i>
16.2	Proposal Submission: <i>All the bidders shall submit their proposals online via EPADS. Proposal submitted in hard shall not be accepted.</i>
16.4	The Proposal submission date, time & address is: <i>Proposals must be submitted online via EPADS no later than the following date and time:</i> September 16, 2026, at 12:00 PM
18.1	Evaluation of Proposals: <i>QCBS procedure shall be followed. Selection Criteria are available in Section-5.</i>
19	Evaluation of Financial Proposal: <i>Under QBCS method</i>
20.1	Negotiations: <i>Negotiations if needed shall be communicated to the consultant.</i>
24.2	Performance Security: <i>Successful bidder is required to submit 10% Performance security of the total contract value in form of CDR or bank guarantee.</i>
24.3	Expected date for commencement of consulting services: <i>Soon after the award of Contract</i>

¹ Consideration may also be given to the number of Pages submitted as compared to the number recommended under Para. 3.4 (c) (ii) of these Instructions.

SECTION-03: TECHNICAL PROPOSAL - STANDARD FORMS

<u>TECH-1:</u>	Technical Proposal Submission Form
<u>TECH-2:</u>	Consultant’s Experience
<u>TECH-3:</u>	Curriculum Vitae (CV) for Proposed Professional Staff
<u>TECH-4:</u>	Description of the Approach, Methodology and Work Plan for Performing the Assignment
<u>TECH-5:</u>	Team Composition and Task Assignments
<u>TECH-6:</u>	Staffing Schedule
<u>TECH-7:</u>	Work Schedule
<u>TECH-8:</u>	Letter of Intent

FORM TECH-01- TECHNICAL PROPOSAL SUBMISSION FORM

To:

Director Procurement
KP-TEVTA Head Office, Sector E-8, Hayatabad Peshawar
Telephone # Tel: 091-9219143

Dear Sir/Madam:

We, the undersigned, offer to provide the consulting services for **“Development and Implementation of the Integrated Training Institutes EEP and Student Specific ERP– ODOO”** in accordance with your Request for Proposal dated: _____ and our Proposal.

We are submitting our Proposal in association with: [Insert a list with full name and address of each associated Consultant]

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the consulting services related to the assignment not later than the date indicated in the Data Sheet.

We undertake that if after the award of contract or during the execution of the project, if any information or document is found fake or misinterpreted, the PE will have the right to cancel contract and to impose the penalty or add in the blacklist or not to pay any expense made or recover all the payment or impose all.

We understand you are not bound to accept any Proposal you receive.

Yours sincerely,

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

FORM TECH-02: CONSULTANT’S EXPERIENCE

<i>[Using the format below, provide information on each assignment for which your firm, and each associate for this assignment, was legally contracted for carrying out consulting services similar to the ones requested under this Assignment. Please provide Client’s certification and/or evidence of the contract agreement.]</i> Assignment name:	Cost of the Project:
Country: Location within country:	Duration of assignment (months):
Name of Client:	Total No of staff-months (by your firm) on the assignment:
Start date (month/year): Completion date (month/year):	1. Total value of the consultancy agreement 2. Value of consultancy services provided by your firm under the agreement (in current PKR or US\$):
Name of associated Consultants, if any:	No of professional staff-months provided by associated Consultants:
Name of senior professional staff of your firm involved and functions performed (indicate most significant profiles such as Project Director/Coordinator, Team Leader):	
Narrative description of Project <i>(You may attach one extra sheet-one side only)</i>:	
Description of actual services provided by your staff within the assignment:	
1. Firms Name: 2. Completion Certificate/ Contract/ Work-Order/ Certificate by the Client / Employer that proves the performance of the above consultancy service.	

SECTION-03: TECHNICAL PROPOSAL - STANDARD FORMS

FORM TECH-03: CURRICULUM VITAE (CV) FOR PROPOSED PROFESSIONAL STAFF

1. Proposed Position [Title of the position]: _____
2. Name of Firm [Insert name of firm proposing the staff]: _____
3. Name of Staff [Insert full name]: _____
4. Date of Birth: _____ Nationality: _____
5. CNIC No (if Pakistani): _____ or Passport No: _____
6. Education:

Degree	Major/Minor	Institution	Completion Date (MM/YYYY)

7. Membership of Professional Associations: _____
8. Other Training [Indicate significant training since degrees under 6 - Education were obtained]:

9. Languages [For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing]: _____
10. Employment Record (within Pakistan) [Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment on the following format:

Employer	Position	From (MM/YYYY)	To (MM/YYYY)

11. Employment Record (International) [Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment on the following format:

Employer	Country	Position	From (MM/YYYY)	To (MM/YYYY)

SECTION-03: TECHNICAL PROPOSAL - STANDARD FORMS

12. Detailed Tasks Assigned

[List all tasks to be performed under this assignment]

13. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any willful misstatement described herein may lead to my disqualification or dismissal, if engaged.

[Signature of staff member or authorized representative of the staff] _____

Full name of authorized representative (attach authority letter): _____

Date: (Day/Month/Year) _____

FORM TECH-04: DESCRIPTION OF APPROACH, METHODOLOGY AND WORK PLAN FOR
PERFORMING THE ASSIGNMENT

Technical approach, methodology and work plan are key components of the Technical Proposal. You are suggested to present your Technical Proposal (Demonstration of systems, inclusive of charts and diagrams) divided into the following three chapters:

a) Technical Approach and Methodology: In this chapter, you should explain your understanding of the objectives of the assignment, approach to the services, methodology for carrying out the activities and obtaining the expected output, and the degree of detail of such output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.

b) Work Plan: In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan. A list of the final documents, including reports, drawings, and tables to be delivered as final output, should be included here. The work plan should be consistent with the Work Schedule of Form TECH-7.

c) Organization and Staffing: In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]

SECTION-03: TECHNICAL PROPOSAL - STANDARD FORMS

FORM TECH-05: TEAM COMPOSITION AND TASK ASSIGNMENTS

Professional Staff							
S. No.	Name of Staff	CNIC No./Passport	Firm	Area of Expertise	Position	Task Assigned	Full time/part time/consultant
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

SECTION-03: TECHNICAL PROPOSAL - STANDARD FORMS

FORM TECH-06: STAFFING SCHEDULE

Full time input

Part time input

S. No.	Name of Staff ¹	Staff input (in the form of a bar chart) ²							Total
		Duty	Jan	Feb	Mar	Apr	May	Jun...	
Local Staff									
1		Home							
		Field ³							
2		Home							
		Field							
3		Home							
		Field							
4		Home							
		Field							
5		Home							
		Field							
Foreign Staff									
06		Home							
		Field							
And so on.....									
Grand Total									

1. For Professional Staff the input should be indicated individually; for Support Staff it should be indicated by category (e.g.: draftsmen, clerical staff, etc.).
2. Months are counted from the start of the assignment. For each staff indicate separately staff input for home and field work.
3. Field work means work carried out at a place other than the Consultant's home office.

SECTION-03: TECHNICAL PROPOSAL - STANDARD FORMS

FORM TECH-07: WORK SCHEDULE

S. No.	Activity ¹	Month ²					
		Jan	Feb	Mar	Apr	May	Jun...

1. Indicate all main activities of the assignment, including delivery of reports (e.g.: inception, interim, and final reports), and other benchmarks such as Client approvals. For phased assignments indicate activities, delivery of reports, and benchmarks separately for each phase.
2. Duration of activities shall be indicated in the form of a bar chart.

LETTER OF INTENT

Reference to your Request for Proposal for the Hiring of Consultancy Firm(s) for Provision of Digital Skills Training Services under the project “Development and implement of Training Institutes ERP and Students Specific ERP-Odoo”, I _____s/o _____CNIC # _____ have the qualification and experience required for the ERP Service provider. I undertake that if the consultancy firm M/S _____ is selected, I will serve with them as a ERP Service provider and will be available for provision of ERP services during the contract duration.

Trainer

Training Consultancy Firm

Signature: _____

Signature: _____

Name: _____

Name: _____

SECTION-04. FINANCIAL PROPOSAL - STANDARD FORMS

Financial Proposal Standard Forms shall be used for the preparation of the Financial Proposal according to the instructions provided under Section 2. Such Forms are to be used whichever is the selection method indicated in the Letter of Invitation.

FORM FIN-01: FINANCIAL PROPOSAL SUBMISSION FORM

To

Director Procurement
KP-TEVTA Head Office, Sector-8, Hayatbad Peshawar
Telephone # Tel: 091-9219143

Dear Sir/Madams:

We, the undersigned, offer to provide the consulting services for *“Provision of Digital Skills training Services under the project “Training Institutes and Students Specific ERP-Odoo”* in accordance with your Request for Proposal dated: _____. Our attached Financial Proposal is for the sum of [Insert amount(s) in words and figures].

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to the expiration of the validity period of the Proposal.

Commissions and gratuities paid or to be paid by us to agents relating to this Proposal and Contract execution, if we are awarded the Contract, are listed below:

Name and Address of Agents: _____
Amount and Currency: _____
Purpose of Commission or Gratuity: _____

We understand you are not bound to accept any Proposal you receive. We remain,

Yours sincerely,

Authorized Signature [In full and initials]: _____

Name and Title of Signatory: _____

Name of Firm: _____

Address: _____

FORM FIN-02: SUMMARY OF COSTS

Item	Costs
	<i>Indicate Local Currency</i>
Total Costs of Financial Proposal	

FORM FIN-03: BREAKDOWN OF COST BY ACTIVITY

Bidders shall submit their financial proposal according the format given below

S#	Description of Services	Unit	Quoted Price	Total
1				
2				
3				
4				
5				
6				
7				
8				
	Sub-total excluding Taxes			
	Taxes (GST/Service Tax)			
	Total including Taxes			

SECTION-05: TERMS OF REFERENCE (TOR)

“DEVELOPMENT AND IMPLEMENTATION OF THE INTEGRATED TRAINING INSTITUTES ERP AND STUDENT SPECIFIC ERP– ODOO” .

1: PROJECT BACKGROUND:

The Khyber Pakhtunkhwa Technical Education & Vocational Training Authority (KP-TEVTA) is responsible for the planning, management, coordination and delivery of technical and vocational education and training (TVET) across Khyber Pakhtunkhwa through its Head Office and a large network of (125 Nos.) technical and vocational training institutes.

With the expansion of its institutional network and increasing volume of administrative, academic, financial, procurement, human resource, inventory and student-related information, KP-TEVTA requires an integrated and centralized Enterprise Resource Planning (ERP) solution to improve operational efficiency, transparency, data accuracy, reporting and management decision-making.

At present, various functions and institutional records are managed through multiple systems, applications and manual processes, resulting in challenges relating to data integration, information sharing, real-time reporting, standardization of processes and centralized monitoring.

KP-TEVTA therefore intends to implement an Odoo Enterprise-based Integrated ERP System to digitally transform and streamline its core business and institutional processes. The proposed ERP shall provide an integrated platform for Finance & Accounts, Budgeting, Procurement, Inventory & Stores, Fixed Assets, Human Resource Management, Payroll, Projects/ADP, Student/Institute Management, Reporting and Management Information Systems, along with other modules identified during the requirements analysis and implementation phase.

The project shall cover business process assessment, system configuration and customization, data migration, integration, testing, deployment, user training, documentation, Go-Live and post-Go-Live technical support. The selected firm shall work closely with KP-TEVTA to ensure that the ERP solution is aligned with the Authority's operational requirements, applicable Government rules and regulations, and the needs of its Head Office and field institutes.

The overall objective of the project is to establish a secure, scalable, integrated and user-friendly ERP platform that enables KP-TEVTA to improve institutional governance, automate business processes, enhance transparency and accountability, reduce manual work, strengthen data management, and provide timely and reliable information for effective management and decision-making.

2: SCOPE OF WORK:

The selected firm shall be responsible for the **end-to-end implementation of an integrated Odoo Enterprise ERP solution** for KP-TEVTA, including system configuration, customization, data migration, integration, testing, deployment, training, documentation and post-Go-Live support.

The scope of work shall include, but not be limited to, the following:

1. Business Process Assessment & Requirements Analysis

- Conduct detailed consultations with KP-TEVTA Head Office and selected field institutes.
- Review existing business processes, systems, registers, databases and workflows.
- Identify process gaps, duplication and opportunities for automation.
- Prepare a detailed **Business Requirement Specification (BRS)** and implementation plan.

- Configure workflows in accordance with approved KP-TEVTA processes and applicable Govt. Rules.

2. ERP Solution & Module Implementation

The bidder shall configure and implement the required Odoo Enterprise modules, including:

- Finance & Accounts
- Budgeting & Financial Management
- Procurement & Contract Management
- Inventory/Stores Management
- Fixed Assets Management
- Human Resource Management
- Payroll Management
- Project/ADP Management
- Institute Management
- Student/Trainee Management
- Attendance & Leave Management
- Document Management
- Management Information System (MIS)
- Dashboards & Management Reporting

Additional modules may be configured/customized where identified and approved during the requirements analysis phase. (Details as per **Functional Requirements Specifications Annexed in this RFP**).

The bidder shall be responsible for delivering a fully functional, integrated and operational ERP solution meeting the approved requirements of KP-TEVTA. All activities necessary for successful implementation, even if not specifically listed above but reasonably required to achieve the intended functionality and performance of the ERP, shall be included in the bidder's implementation methodology and proposal, subject to the provisions of the RFP and contract. (**Detail Functional Requirements Specifications Annexed in this RFP**).

3: DELIVERABLES:

The successful bidder shall provide the following deliverables (Detail mentation in Functional Requirement & Specifications) during the implementation and support period:

Sr. No.	Deliverable	Description
1	Inception & Implementation Plan	Detailed project plan, methodology, milestones, resource deployment and implementation schedule.
2	Business Requirement Specification (BRS)	Detailed documentation of KP-TEVTA business processes, requirements, workflows and functional requirements.
3	System Design & Architecture	Proposed ERP architecture, database, hosting/deployment model, security and integration design.
4	ERP Configuration & Customization	Configured Odoo Enterprise modules, workflows, forms, approval processes, reports and approved custom developments.
5	Functional ERP Modules	Fully configured and operational modules for Finance, Procurement, Inventory, Assets, HR/Payroll, Projects/ADP, Student/Institute Management, Reporting and other approved modules.
6	Data Migration	Data migration templates, cleaned/validated data, migrated master and historical data, reconciliation and

Sr. No.	Deliverable	Description
		migration reports.
7	Integration & APIs	Required system interfaces, APIs, integration configurations and technical documentation.
8	Testing & UAT Reports	Test plans, test cases, test results, defect-resolution reports and User Acceptance Testing (UAT) documentation.
9	Training & Capacity Building	Training sessions for administrators, functional users and institute users, including training materials and attendance records.
10	User & Technical Manuals	User manuals, administrator manuals, configuration documents and technical/system documentation.
11	Security & Backup Configuration	User access controls, audit trails, backup/recovery procedures and security configurations.
12	Go-Live & Deployment	Production deployment, final data migration, user activation, Go-Live support and system stabilization.
13	Post-Go-Live Support	Technical support, troubleshooting, bug fixing, system monitoring and performance optimization during the agreed support/warranty period.
14	SLA & Support Reports	Periodic support reports showing incidents, response/resolution times and actions taken.
15	Final Handover Report	Complete project completion report, system status, outstanding issues, documentation and formal handover to KP-TEVTA.
16	Knowledge Transfer	Transfer of technical and functional knowledge to designated KP-TEVTA personnel for sustainable system operation and administration.

Final Acceptance

All deliverables shall be subject to review, testing and acceptance by KP-TEVTA. The bidder shall rectify any deficiencies, errors or non-conformities identified during review or testing at no additional cost, where such rectification falls within the approved scope of work.

The final project shall be considered successfully completed only after Go-Live, successful UAT, completion of agreed training, submission of required documentation, resolution of critical defects and formal acceptance by KP-TEVTA.

4. DURATION OF THE SERVICE:

The consultancy firms once hired shall complete develop and implement ERP Package as per the timelines (One year) breakup of timelines as per implementation work plan and contract agreement.

5: EVALUATION CRITERIA AND PROCEDURE:

Bidding Procedure:

The procurement shall be carried out using the **Single Stage – Two Envelope procedure**. Under this procedure, each bidder is required to submit/upload their **technical** and **financial proposals** for complete package.

Method of Selection:

- The Quality and Cost Based Selection method shall be used. The bidder obtaining the highest combined Technical and Financial Score shall be ranked first and shall be recommended for award of the contract for the complete package, subject to fulfillment of all eligibility, qualification and other requirements of the Bidding Documents.

Evaluation Process:

- Stage 1 – Mandatory Eligibility Screening:** Verification of all mandatory eligibility criteria as listed in following section. This is a **pass/fail** stage – a bid must *fully meet* each requirement (with evidence) to qualify for further evaluation. Bids failing to provide necessary evidence or failing any criterion will be declared *non-responsive* and will not proceed to Stage 2.
- Stage 2 – Technical Evaluation & Scoring:** Detailed technical evaluation of bids that pass Stage 1, using the scoring system in this section. Bids will be assessed on their technical merits (such as relevant experience, methodology, staffing, etc.). The Technical Score (Ts) will be assigned out of 100 points. A minimum technical score of **70%** (70 points) is required to be considered technically qualified. Bidders who score below 70 points will not be considered further.
- Stage 3 – Financial Evaluation & Most Advantageous Bid:** The **Financial Proposals** of all technically qualified bidders (those scoring ≥ 70) will be opened/considered for final evaluation. At this stage, the Committee will confirm financial proposal compliance (proper form, no arithmetic errors, etc.). The lowest will score 30.
- Stage 4 – Final Evaluation:** The final evaluation will be done on **Quality-and-Cost Based Selection (QCBS)**. The technical bid will be weighted 70% and the financial bid will be weighted 30% in the final evaluation. The highest combine consolidated score will be considered as the most advantageous bid for award recommendation (subject to post-qualification verification).

Mandatory Eligibility Criteria

In this stage, **documentary evidence** for the following mandatory criteria must be provided. The bidder must **“Pass”** all criteria to remain in the competition. Failure in any one criterion (or omission of required document) will result in **disqualification (non-responsiveness)** at this stage and *will not proceed to further evaluation*:

#	Criteria	Availability
1.	The consulting firm shall have at least 5 years of experience in providing software development services to public sector organizations. Bidders provide proof of registration of business in the form of “Certificate of Incorporation” issued by Security and Exchange Commission of Pakistan (SECP).	Mandatory

2.	Must be registered with Software Export Board and must have a valid and active certificate.	Mandatory
3.	The firm must be registered with FBR.	Mandatory
4.	The firm must have valid and active status certificate of FBR (ATL)	Mandatory
5.	The firm must be registered with Khyber Pakhtunkhwa Revenue Authority (KPRA)	Mandatory
6.	Affidavit on stamp paper that the firm has never been blacklisted by any government or related organization.	Mandatory
7.	Average Annual turnover of at least PKR 40 million of last 3 years as per the audit report. Provide the revenues in table on company letterhead.	Mandatory
8.	Joint Venture (JV) with other company is not allowed. Provide a statement on letterhead.	Mandatory
9.	The consulting firm must provide Manufacturers/Proprietor "Authorization Form" (if applicable). Provide a proof of official partnership with Odoo (Ready, Silver, Gold)	Mandatory

Technical Evaluation

In the second stage, the Committee will evaluate the technical aspects of the eligible bids in detail and assign Technical Scores out of 100 based on the following criteria. The technical proposal should be structured to facilitate evaluation against these criteria. The maximum points for each criterion are as follows:

Company_age, experience, and registrations

Evaluation Criteria	Evaluation Sub-criteria	Maximum Marks
Years of Experience. Provide SECP incorporation certificate. (Maximum Marks 6)	<6 Years Experience	2 marks
	<8 Years Experience	4 marks
	More than 8 Years Experience	6 marks
Relevant Odoo projects completed in public sector organization. Provide copies of Agreement/PO and completion certificates (Maximum Marks 25)	5 Customers	15 marks
	6 Customers	20 marks
	7 or more Customers	25 marks
Relevant Odoo projects completed in private sector organizations. Provide copies of Agreement/PO and completion certificates (Maximum Marks 10)	5 Customers	6 marks
	6 Customers	8 marks
	7 or more Customers	10 marks
Service Level Agreements (SLAs) executed for relevant projects in public sector organizations, demonstrating over 95% client satisfaction.	Minimum 1 Customer	5 marks
Valid and Active ISO 9001:2015 Certification (Quality Management Standard)		2 marks
Valid and Active ISO/IEC 27001:2022 Certification (Information Security Management System)		2 marks
Average Annual Turnover of last 03 years, audited with UDIN. (Maximum Marks 20)	40 million	10 marks
	40 – 50 million	15 marks
	More than 50 million	20 marks
Total marks – Company Profile		70 marks

Technical Approach, Methodology, and Detailed Work Plan

Evaluation Criteria	Evaluation Sub-criteria	Maximum marks
A Strategic Roadmap for Successful Project Delivery	- Technical Approach (5) - Methodology (5) - Implementation Workplan (5)	15 marks
Total marks – Technical Approach		15 marks

Management, Key Personnel, and Staffing Plan

Evaluation Criteria	Evaluation Sub-criteria	Maximum marks
Project Manager (1 Person) Experience (Maximum Marks 4)	5 or less Years	0 mark
	5 – 10 years	2 marks
	More than 10 years	4 marks
Functional Consultant (3 Persons) Experience Must provide Odoo Certificates (Maximum Marks 06)	2 or less Years	0 mark
	2 – 4 years	3 marks
	More than 4 years	6 marks
Software Developers (2 Persons) Experience (Maximum Marks 02)	2 or less Years	0 mark
	2 – 4 years	1 mark
	More than 4 years	2 marks
Quality Assurance Manager (2 Person) Experience (Maximum Marks 02)	2 or less Years	0 mark
	2 – 4 years	1 mark
	More than 4 years	2 marks
DevOps Engineer (1 Person) Experience (Maximum Mark 1)	2 or less Years	0 mark
	More than 2 years	1 mark
Total marks – Management		15 marks

After scoring each proposal, the total technical score out of 100 will be recorded. Bidders scoring <70 points will be considered technically non-qualified and rejected at this stage. Bidders scoring ≥70 will proceed to financial evaluation.

Financial Proposal Evaluation:

Upon completion of the technical evaluation, the Procurement Committee shall open and evaluate the Financial Proposals of the bidders who meet all Mandatory Eligibility Criteria and achieve a minimum technical score of 70 marks. The consulting firm that submits the **lowest financial proposal** will receive the **maximum financial score of 100 marks**. The other firm's financial proposals will be evaluated on the basis of the following formula:

Financial Score (Fs) = (Lowest financial proposal ÷ Financial proposal of the firm) × 100

Technical and Financial Proposal Evaluation Criteria

The agreed weightage for the quality is **70%** and cost is **30%**. The total score of each firm is calculated on the basis of the following formula.

Total Score = (Technical Score × 0.70) + (Financial Score × 0.30)

The firm achieving the highest combined technical and financial score will be invited for negotiations and presentation.

Negotiations will include the proposed technical approach and methodology, work plan, organization and staffing, and any suggestions made by the Consulting firm to improve the performance and efficiency of the work. Attendance of the authorized representative is mandatory in the negotiations. Failure in satisfying such requirements may result to proceed to negotiate with the next-ranked Consulting firm. The discussion made will be minuted and will be part of the contract

Functional Requirements Specification

Odoo ERP Upgrade, Reimplementation and Expansion

(Details Functional Requirement Specification Annex-FRS at the end of this RFP)

8: PAYMENT SCHEDULE:

Sr. No.	Deliverables / Milestones	% Payment
1	Inception Report, Detailed Implementation Plan & Business Requirement Specification (BRS) — submission and approval by KP-TEVTA	15%
2	ERP Configuration, Customization, Core Module Development, and System Integration — completion and successful testing/approval of configured modules	30%
3	User Acceptance Testing (UAT), Training, Documentation & Go-Live — successful UAT, completion of training and deployment of the ERP into production	25%
4	Successful Go-Live & System Stabilization — completion of Go-Live and resolution of critical implementation issues	10%
5	Post-Go-Live Support / Warranty — satisfactory provision of support services for the agreed support period	20%
	Total	100%

SECTION-06: GENERAL CONDITIONS OF THE CONTRACT

1. GENERAL PROVISIONS

1.1. Definitions:

Unless the context otherwise requires, the following terms whenever used in this Contract have the following meanings:

- (a) "Applicable Law" means the Khyber Pakhtunkhwa Public Procurement Act, thereunder Rules 2014.
- (b) "Procuring Entity PE" means the implementing department which signs the contract i.e. KP-TEVTA
- (c) "Consultant" means a professional who can study, design, organize, evaluate and manage projects or assess, evaluate and provide specialist advice or give technical assistance for making or drafting policies, institutional reforms and includes private entities, consulting firms, legal advisors, engineering firms, construction managers, management firms, procurement agents, inspection agents, auditors, international and multinational organizations, investment and merchant banks, universities, research institutions, government agencies, non-governmental organizations, and individuals.
- (d) "Contract" means the Contract signed by the Parties and all the attached documents listed in its Clause-1 and the Appendices.
- (e) "Contract Price" means the price to be Paid for the Performance of the Services, in accordance with Clause 6;
- (f) "Effective Date" means the date on which this Contract comes into force and effect pursuant to Clause 2.1.
- (g) "Foreign Currency" means any currency other than the currency of the PE's country.
- (h) "Government" means the Government of Khyber Pakhtunkhwa.
- (i) "Local Currency" means Pak Rupees.
- (j) "Member" means any of the entities that make up the joint venture/consortium/association, and "Members" means all these entities.
- (k) "Party" means the PE or the Consultant, as the case may be, and "Parties" means both of them.
- (l) "Personnel" means Persons hired by the Consultant or by any Sub Consultants and assigned to the Performance of the Services or any Part thereof.
- (m) "SC" means the Special Conditions of Contract by which the GC may be amended or supplemented.
- (n) "Services" means the consulting services to be performed by the Consultant pursuant to this Contract, as described in the Terms of References.
- (o) "Sub-Consultants" means any Person or entity to whom/which the Consultant subcontracts any Part of the Services.
- (p) "In writing" means communicated in written form with proof of receipt.

1.2 Law Governing Contract

This Contract, its meaning and interpretation, and the relation between the Parties shall be governed by the applicable law.

1.3 Language

This Contract is executed in the English language, which shall be the binding and controlling language for all matters relating to the meaning or interpretation of this Contract.

1.4 Notices

1.4.1 Any notice, request or consent required or permitted to be given or made pursuant to this Contract shall be in writing. Any such notice, request or consent shall be deemed to have been given or made when delivered in Person to an authorized representative of the Party to whom the communication is addressed, or when sent to such Party at the address specified in the SC.

1.4.2 A Party may change its address for notice hereunder by giving the other Party notice in writing of such change to the address specified in the SC.

1.5 Location

The Services shall be performed at such locations as are specified in the special condition of contract and, where the location of a particular task is not so specified, at such locations, whether in the Government's country or elsewhere, as the PE may approve.

1.6 Authority of Member in Charge

In case the Consultant consists of a joint venture/ consortium/ association of more than one individual firms, the Members hereby authorize the individual firms or specified in the SC to act on their behalf in exercising all the Consultant's rights and obligations towards the PE under this Contract, including without limitation the receiving of instructions and Payments from the PE.

1.7 Authorized Representative

Any action required or permitted to be taken, and any document required or permitted to be executed under this Contract by the PE or the Consultant may be taken or executed by the officials specified in the SC.

1.8 Taxes & Duties

The Consultant, Sub-Consultants, and their Personnel shall Pay such direct or indirect taxes, duties, fees, and other impositions levied under the Applicable Law as specified in the SC, the amount of which is deemed to have been included in the Contract Price.

1.9 Fraud & Corruption

A. If the PE determines that the Consultant and/or its Personnel, sub-contractors, sub-consultants, services providers and suppliers has engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices, in competing for or in executing the Contract, then the PE may, after giving 14 days' notice to the

Consultant, terminate the Consultant's employment under the Contract, and may resort to other remedies including blacklisting/disqualification as provided in KPPR 2014.

Any Personnel of the Consultant who engages in corrupt, fraudulent, collusive, coercive, or obstructive practice during the execution of the Contract, shall be removed in accordance with Sub-Clause 4.2.

Integrity Pact

B. If the Consultant or any of his Sub-consultants, agents or servants is found to have violated or involved in violation of the Integrity Pact signed by the Consultant as Appendix-G to this Form of Contract, then the Client shall be entitled to:

- (a) recover from the Consultant an amount equivalent to ten times the sum of any commission, gratification, bribe, finder's fee or kickback given by the Consultant or any of his Sub-consultant, agents or servants;
- (b) terminate the Contract; and
- (c) Recover from the Consultant any loss or damage to the Client as a result of such termination or of any other corrupt business practices of the Consultant or any of his Sub-consultant, agents or servants.

On termination of the Contract under Sub-Para (b) of this Sub Clause, the Consultant shall proceed in accordance with Sub Clause 1.9 A. Payment upon such termination shall be made under Sub-Clause 1.9 A after having deducted the amounts due to the Client under 19 B Sub-Para (a) and (c).

2. COMMENCEMENT, COMPLETION, MODIFICATION AND TERMINATION OF CONTRACT

2.1 Effectiveness of Contract

This Contract shall come into effect on the date the Contract is signed by either Parties or such other later date as may be stated in the SC. The date the Contract comes into effect is defined as the Effective Date.

2.2 Commencement of Services

The Consultant shall begin carrying out the Services not later than the number of days after the Effective Date specified in the SC.

2.3 Expiration of Contract

Unless terminated earlier pursuant to Clause GC 2.6 hereof, this Contract shall expire at the end of such time period after the Effective Date as specified in the SC.

2.4 Modifications or Variations

Any modification or variation of the terms and conditions of this Contract, including any

SECTION-06: GENERAL CONDITIONS OF THE CONTRACT

modification or variation of the scope of the Services, may only be made by written agreement between the Parties. However, each Party shall give due consideration to any proposals for modification or variation made by the other Party.

2.5 Force Majeure

The failure on the Part of the Parties to Perform their obligation under the contract will not be considered a default if such failure is the result of natural calamities, disasters and circumstances beyond the control of the parties.

2.5.1 No Breach of Contract

The failure of a Party to fulfill any of its obligations under the contract shall not be considered to be a breach of, or default under, this Contract insofar as such inability arises from an event of Force Majeure, provided that the Party affected by such an event (a) has taken all reasonable precautions, due care and reasonable alternative measures in order to carry out the terms and conditions of this Contract, and (b) has informed the other Party as soon as possible about the occurrence of such an event.

2.5.2 Extension of Time

Any period within which a party shall, pursuant to this Contract, complete any action or task, shall be extended for a period equal to the time during which such party was unable to Perform such action as a result of Force Majeure.

2.5.3 Payments

During the period of their inability to Perform the Services as a result of an event of Force Majeure, the Consultant shall be entitled to continue to be Paid under the terms of this Contract, as well as to be reimbursed for additional costs reasonably and necessarily incurred by them during such period for the purposes of the Services and in reactivating the Service after the end of such period.

2.6 Termination

2.6.1 By the PE

The PE may terminate this Contract in case of the occurrence of any of the events specified in Paragraphs (a) through (f) of this Clause GC 2.6.1. In such an occurrence the PE shall give a not less than thirty (30) days' written notice of termination to the Consultant, and sixty (60) days' in the case of the event referred to in (e).

- (a) If the Consultant does not remedy the failure in the Performance of their obligations under the Contract, within thirty (30) days after being notified or within any further period as the PE may have subsequently approved in writing.
- (b) If the Consultant becomes insolvent or bankrupt.
- (c) If the Consultant, in the judgment of the PE has engaged in corrupt or

SECTION-06: GENERAL CONDITIONS OF THE CONTRACT

fraudulent practices in competing for or in executing the Contract.

- (d) If, as the result of Force Majeure, the Consultant(s) are unable to perform a material portion of the Services for a period of not less than sixty (60) days.
- (e) If the PE, in its sole discretion and for any reason whatsoever, decides to terminate this Contract.
- (f) If the Consultant fails to comply with any final decision reached as a result of arbitration proceedings pursuant to Clause GC 8 hereof.

2.6.2 By the Consultant

The Consultants may terminate this Contract, by not less than thirty (30) days' written notice to the PE, such notice to be given after the occurrence of any of the events specified in Paragraphs (a) through (c) of this Clause GC 2.6.2:

- (a) If the PE fails to pay any money due to the Consultant pursuant to this Contract without consultant's fault.
- (b) Pursuant to Clause GC 7 hereof within forty-five (45) days after receiving written notice from the Consultant that such Payment is overdue.
- (c) If, as the result of Force Majeure, the Consultant is unable to perform a material portion of the Services for a period of not less than sixty (60) days.

If the PA fails to comply with any final decision reached as a result of arbitration pursuant to Clause GC 8 hereof.

2.6.3 Payment Upon Termination

Upon termination of this Contract pursuant to Clauses GC 2.6.1 or GC. 2.6.2, the PE shall make the following Payments to the Consultant:

- (a) Payment pursuant to Clause GC 6 for Services satisfactorily Performed prior to the effective date of termination;
- (b) except in the case of termination pursuant to Paragraphs (a) through, and (f) of Clause GC 2.6.1, reimbursement of any reasonable cost incident to the prompt and orderly termination of the Contract, including the cost of the return travel of the Personnel and their eligible dependent's.

3. OBLIGATION OF THE CONSULTANT

3.2 General

3.2.1 Standard of Performance

The Consultant shall Perform the Services and carry out their obligations hereunder with all due diligence, efficiency and economy, in accordance with generally accepted professional standards and practices, and shall observe sound management practices, and employ appropriate technology and safe and effective equipment, machinery, materials and methods. The Consultant shall always act, in respect of any matter relating to this Contract or to the Services, as faithful advisers to the PE, and shall at all times support and safeguard the

SECTION-06: GENERAL CONDITIONS OF THE CONTRACT

PE's legitimate interests in any dealings with Sub-Consultants or third parties.

3.3 Conflict of Interests

The Consultant shall hold the PE's interests Paramount, without any consideration for future work, and strictly avoid conflict with other assignments or their own corporate interests.

3.3.1 Consultants not to Benefit from Commissions, Discounts, etc.

The Payment of the Consultant pursuant to Clause GC 6 shall constitute the Consultant's only Payment in connection with this Contract or the Services, and the Consultant shall not accept for their own benefit any trade commission, discount, or similar Payment in connection with activities pursuant to this Contract or to the Services or in the discharge of their obligations under the Contract, and the Consultant shall use their best efforts to ensure that the Personnel, any Sub-Consultants, and agents of either of them similarly shall not receive any such additional Payment.

3.3.2 Prohibition of Conflicting Activities

The Consultant agrees that, during the term of this Contract and after its termination, the Consultant and any entity affiliated with the Consultant, as well as any Sub-Consultants and any entity affiliated with such Sub Consultants, shall be disqualified from providing goods, works or services (other than consulting services) resulting from or directly related to the Consultant's Services for the preparation or implementation of the project.

3.3.3 Prohibition of Conflicting Activities

The Consultant shall not engage, and shall cause their Personnel as well as their Sub-Consultants and their Personnel not to engage, either directly or indirectly, in any business or professional activities which would conflict with the activities assigned to them under this Contract.

3.4 Confidentiality

Except with the prior written consent of the PE, the Consultant and the Personnel shall not at any time communicate to any Person or entity any confidential information acquired in the course of the Services, nor shall the Consultant and the Personnel make public the recommendations formulated in the course of, or as a result of, the Services.

3.5 Consultant's Actions Requiring PE's Prior Approval

The Consultant shall obtain the PE's prior approval in writing before taking any of the following actions:

- (a) appointing such members of the Personnel not listed, and
- (b) any other action that may be specified in the SC.

3.6 Reporting Obligations

SECTION-06: GENERAL CONDITIONS OF THE CONTRACT

- (a) The Consultant shall submit to the PE the reports and documents specified in in TOR hereto, in the form, in the numbers and within the time Period set forth in the said TOR.
- (b) Final reports shall be delivered in USB/CD ROM in addition to the hard copies specified in said TOR.

3.7 Documents Prepared by the Consultant to be the Property of the PE

- (a) All plans, drawings, specifications, designs, reports, other documents and software submitted by the Consultant under this Contract shall become and remain the property of the PE, and the Consultant shall, not later than upon termination or expiration of this Contract, deliver all such documents to the PE, together with a detailed inventory thereof.

3.8 Accounting, Inspection and Auditing

- 3.8.1 The Consultant shall keep, and shall cause its Sub-consultants to keep, accurate and systematic accounts and records in respect of the Contract, in accordance with internationally accepted accounting principles and in such form and detail as will clearly identify relevant time changes and costs.
- 3.8.2 The Consultant shall Permit, and shall cause its Sub-consultants to Permit, the PE and/or Persons appointed by the PE to inspect its accounts and records relating to the Performance of the Contract and the submission of the Proposal to provide the Services, and to have such accounts and records audited by auditors appointed by the PE if requested by the PE. The Consultant's attention is drawn to Clause 1.9.1 which provides, inter alia, that acts intended to materially impede the exercise of the PE's inspection and audit rights provided for under Clause 3.8 constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the PE's prevailing sanctions procedures.).

3.9 Professional liability of consultant

- 3.9.1 The consultant shall be liable for consequence of errors or omissions on its part. The extent of liability of the consultant in no case should be less than consideration of the contract.
- 3.9.2 The consultant shall be held liable for all losses or damages and shortcomings in deliverables etc, suffered by the procuring entity as a result of misconduct or inadequate services in performing the consulting services.
- 3.9.3 In case of poor/unsatisfactory performance or failure to complete any of the deliverables/output, the procuring entity will have the right to forfeit their performance security or deduct the same amount allocated for the said deliverables/output from the contract price and may terminate the contract or shall impose both.

3.10 Monitoring and Evaluation

- 3.10.1 The Consultant shall submit the report along with the attendance to the KP-TEVTA. The PE shall monitor and evaluate and visit the consultant business place each

SECTION-06: GENERAL CONDITIONS OF THE CONTRACT

month. The Consultant shall facilitate the PE for inspection of the relevant records and the consultant shall produce the relevant records on demand of PE for evaluation.

- 3.10.2 If the consultant failed to provide the relevant records to the PE, the PE shall have the right to terminate the contract and impose the penalty of not less than the consideration of the contract as the case may be.

4. CONSULTANT PERSONNEL

4.1 Description of Personnel

The Consultant shall employ and provide such qualified and Personnel experienced Personneland Sub-Consultants as are required to carry out the Services. The titles, agreed job descriptions, minimum qualifications, and estimated Period of engagement in the carrying out of the Services of the Consultant's Key Personnel are described in Section 3 & TOR. The Key Personnel and Sub-Consultants listed by title as well as by name in proposal are hereby approved by the PE.

4.2 Removal and/or Replacement of Personnel

- (a) Except as the PE may otherwise agree, no changes shall be made in the Key Personnel. If, for any reason beyond the reasonable control of the Consultant, such as retirement, death, medical incapacity, among others, it becomes necessary to replace any of the Key Personnel, the Consultant shall provide as a replacement a Person of equivalent or better qualifications.
- (b) If the PE finds that any of the Personnel have (i) committed serious misconduct or have been charged with having committed a criminal action, or (ii) have reasonable cause to be dissatisfied with the Performance of any of the Personnel, then the Consultant shall, at the PE's written request specifying the grounds thereof, provide as a replacement a Person with qualifications and experience acceptable to the PE.
- (c) The Consultant shall have no claim for additional costs arising out of or incidental to any removal and/or replacement of Personnel.

5. OBLIGATIONS OF THE PE

5.1 Assistance and Exemptions

The PE shall use its best efforts to ensure that the Government shall provide the Consultant such assistance and exemptions as possible.

5.2 Change in the Applicable Law Related to Taxes and Duties

If, after the date of this Contract, there is any change in the Applicable Law with respect to taxes and duties, the PE will deduct all the taxes and duties as per prevailing applicable tax laws.

5.3 Services and Facilities

The PE shall make available free of charge to the Consultant the possible Services and Facilities.

SECTION-06: GENERAL CONDITIONS OF THE CONTRACT

6. PAYMENTS TO THE CONSULTANT

6.1 Lump-sum Payment

The total Payment due to the Consultant shall not exceed the Contract Price which is an all-inclusive fixed lump-sum covering all costs required to carry out the Services described in TOR and Scope of Services, the Contract Price may only be increased above the amounts stated in Clause If the Parties have agreed to additional Payments in accordance with Clause 2.4.

6.2 Contract Price

The price Payable in Pak Rupees is set forth in the SC.

6.3 Payment for Additional Services

For the purpose of determining the remuneration due for additional services as may be agreed under Clause 2.4, a breakdown of the lump sum price shall be provided.

6.4 Terms and Conditions of Payment

Payments will be made to the account of the Consultant and according to the Payment schedule stated in the SC. Unless otherwise stated in the SC, the first Payment shall be made against the provision by the Consultant of an advance Payment guarantee for the same amount and shall be valid for the period stated in the SC. Such guarantee shall be in the form set forth in Appendix G hereto, or in such other form, as the PE shall have approved in writing. Any other Payment shall be made after the conditions listed in the SC for such Payment have been met, and the Consultant has submitted an invoice to the PE specifying the amount due.

7. GOOD FAITH

- 7.1** The parties undertake to act in good faith with respect to each other's rights under this Contract and to adopt all reasonable measures to ensure the realization of the objectives of this Contract.

8. SETTLEMENT OF DISPUTES

8.1 Amicable Settlement

The parties agree that the avoidance or early resolution of disputes is crucial for a smooth execution of the Contract and the success of the assignment. The parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Contract or its interpretation.

8.2 Dispute Resolution

Any dispute between the parties as to matters arising pursuant to this Contract that cannot be settled amicably within thirty (30) days after receipt by one party of the other Party's request for such amicable settlement may be submitted by either party for settlement in accordance with the provisions specified in the SC.

SECTION-06: GENERAL CONDITIONS OF THE CONTRACT

SPECIAL CONDITIONS OF CONTRACT

Ref. No.	Details
1.1	Khyber Pakhtunkhwa Public Procurement Act and Khyber Pakhtunkhwa Public Procurement Rules 2014.
1.3	English Language
1.4	Procuring Entity: Department of Science, Technology and Information Technology Attention: Project Director - DESC E-mail: projectdirectordesc@gmail.com Consultant: Attention: _____ Facsimile: _____ E-mail: _____
1.5	Service Location: Khyber Pakhtunkhwa
1.6	Joint Venture is not allowed.
1.7	The Authorized Representatives are: For the PE: <u>Director Procurement KP-TEVTA</u> For the Consultant: _____
1.8	All taxes and duties applied by the Government of Pakistan
2.1	Effectiveness of Contract: From the date of signing of the contract
2.2	Date for Commencement of Services: Soon after signing of the contract
2.3	Time Period shall be: The consultancy firms once appointed shall train youth in the employable digital skills outlined against the Package given in the table above within the FY 2026-27 across Khyber Pakhtunkhwa, starting from the date of signing of the contract
5.1	KP-TEVTA will provide possible assistance in the execution of the project.
6.1	The successful bidder shall submit a performance bank security/guarantee @ 10% of the contract value from the scheduled banks.
6.3	The amount is in Pak Rupees <i>[insert amount]</i> .
6.5	The accounts are: for foreign currency or currencies: <i>[insert account]</i> for local currency: <i>[insert account]</i> Payments shall be made according to the schedule mentioned in the TOR.
8.2	Disputes shall be settled by the complaint redressal committee define in KPPRA Act & Rules or through arbitration Act of 1940 or through Grievance Redressal as per KPPRA Rules 2014.

(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 No. _____

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 Khyber Pakhtunkhwa (GoKP) or any administrative subdivision or Entity thereof or any other entity owned or controlled by GoKP 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, fees 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 consultation 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 GoKP, 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 GoKP and has not taken any action or will not take any action to circumvent the above declaration, representation or warranty.

[name of Supplier] accepts full responsibility and strict liability for making any false declaration, not making full disclosure, misrepresenting facts 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 rights and remedies available to GoKP under any law, contract or other instrument, be voidable at the option of GoKP.

Notwithstanding any rights and remedies exercised by GoKP in this regard, [name of Supplier] agrees to indemnify GoKP for any loss or damage incurred by it on account of its corrupt business practices and further Pay compensation to GoKP 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 GoKP.

Name of PE Rep: _____

Name of Seller/Supplier: _____

Signature: _____

Signature: _____

Seal:.....

Seal:

CONTRACT

CONTRACT

THIS CONTRACT ("Contract") is entered into this *[insert starting date of assignment]*, by and between *[insert PE 's name]* ("the PE") having its principal place of business at *[insert PE 's address]*, and *[insert Consultant's name]* ("the Consultant") having its principal office located at *[insert Consultant's address]*.

WHEREAS, the PE wishes to have the Consultant Performing the services hereinafter referred to, and

WHEREAS, the Consultant is willing to perform these services,

NOW THEREFORE THE PARTIES hereby agree as follows:

1. Services

- (i) The Consultant shall perform the services specified in "Terms of Reference and Scope of Services," which is made an integral Part of this Contract ("the Services").
- (ii) The Consultant shall provide the reports listed in Annex B, "Consultant's Reporting Obligations," within the time Period listed in such Annex, and the Personnel listed in Annex C, "Cost Estimate of Services, List of Personnel and Schedule of Rates" to Perform the Services.

2. Duration of Contract

The Consultant shall complete all the deliverables within _____ of contract duration.

3. Payment Terms

A. Ceiling

For Services rendered pursuant to Annex A, the PE shall pay the Consultant an amount not to exceed *[insert amount]*. This amount has been established based on the understanding that it includes all of the Consultant's costs and profits as well as any tax obligation that may be imposed on the Consultant.

B. Payment Conditions

Payment shall be made in *[specify currency]*, no later than 30 days following submission by the Consultant of invoices in duplicate to the Coordinator designated.

4. Project Administration

A. Coordinator

The PE designates Mr./Ms. *[insert name]* as PE's Coordinator; the Coordinator shall be responsible for the coordination of activities under the Contract, for receiving and approving invoices for Payment, and for acceptance of the deliverables by the PE.

INTEGRITY PACT

B. Timesheets

During the course of their work under this Contract the Consultant's employees providing services under this Contract may be required to complete timesheets or any other document used to identify time spent, as instructed by the Coordinator.

C. Records and Accounts

The Consultant shall keep accurate and systematic records and accounts in respect of the Services, which will clearly identify all charges and expenses. The PE reserves the right to audit, or to nominate a reputable accounting firm to audit, the Consultant's records relating to amounts claimed under this Contract during its term and any extension, and for a period of three months thereafter.

5. **Performance Standard:**

The Consultant undertakes to perform the Services with the highest standards of professional and ethical competence and integrity. The Consultant shall promptly replace any employees assigned under this Contract that the PE considers unsatisfactory.

6. **Confidentiality:**

The Consultants shall not, during the term of this Contract and within two years after its expiration, disclose any proprietary or confidential information relating to the Services, this Contract or the PE's business or operations without the prior written consent of the PE.

7. **Ownership of Material:**

Any studies, reports or other material, graphic, software or otherwise, prepared by the Consultant for the PE under the Contract shall belong to and remain the property of the PE. The Consultant may retain a copy of such documents and software.

8. **Consultant not to be engaged in Certain Activities:**

The Consultant agrees that, during the term of this Contract and after its termination, the Consultants and any entity affiliated with the Consultant, shall be disqualified from providing goods, works or services (other than the Services or any continuation thereof) for any project resulting from or closely related to the Services.

9. **Insurance:**

The Consultant will be responsible for taking out any appropriate insurance coverage for their Personnel and equipment's if required.

10. **Assignment:**

The Consultant shall not assign this Contract or Subcontract any portion thereof it without the

CONTRACT

PE's prior written consent.

11. Law Governing Contract and Language:

Applicable law will be that of Government of Khyber Pakhtunkhwa and the contract language shall be English.

12. Dispute Resolution:

Any dispute arising out of this Contract, which cannot be amicably settled between the Parties, shall be referred to adjudication/arbitration in accordance with the Arbitration Act of 1940

For the PE

Signature: _____

Name: _____

Title: _____

For the Consultant

Signature: _____

Name: _____

Title: _____

(Annex-FRS)

Functional Requirements Specification

Odoo ERP Upgrade, Reimplementation and Expansion

OFFICIAL FUNCTIONAL REQUIREMENTS SPECIFICATION

Document field	Value
Issued by	Khyber Pakhtunkhwa Technical Education and Vocational Training Authority (KPTEVTA)
Target platform	Odoo 19 target baseline; final release and edition to be confirmed at design freeze
Document version	Version 2.0
Issue date	20 August 2026
Document classification	Controlled Functional Requirements Specification
Status	Official FRS - controlled baseline; TBD items require resolution

Document Control and Governance

This controlled Functional Requirements Specification defines the approved functional scope and implementation baseline for the KPTEVTA Odoo ERP programme. It consolidates the business requirements, resolves material scope conflicts and identifies policy values or technical assumptions that require formal decision before the relevant design or build commitment.

Version	Date	Purpose	Document status
1.0	12 Feb 2026	Original functional requirements	Source baseline
2.0	18 Aug 2026	Official functional requirements baseline	Controlled baseline

Executive Scope and Delivery Decisions

- Every requirement shall be classified as standard Odoo, configuration, custom extension, integration or policy/TBD before commercial or build commitment.
- The Flectra 1.6 to Odoo 19 work shall be governed as a migration and controlled reimplementation. Data, configuration and custom code shall be assessed separately; code is not assumed to be directly upgradeable.
- Quality inspection, public-sector budgeting, Pakistan payroll, biometric devices, payment gateways, civil-works controls and diary/file movement shall undergo fit-gap validation. Approved gaps may require custom development or external integration.
- Diary/dispatch and document management shall share a common document repository, metadata, access model, retention rules and audit trail, while correspondence and file noting remain a dedicated workflow layer.
- Performance, recovery, retention and security commitments shall be approved as measurable non-functional targets and verified through agreed acceptance evidence.
- Requirement ownership, acceptance evidence, migration reconciliation and change control shall be maintained throughout design, build, testing and deployment.

Requirement Classification and Change Control

Before design sign-off, every requirement shall be assigned an implementation class and an owner. A requirement is not deemed standard configuration merely because a field or screen can be added in Odoo.

Class	Meaning	Required evidence
STD	Available in the approved Odoo edition without custom code.	Configured demonstration and UAT scenario.
CFG	Delivered through settings, master data, access rights, Studio or report configuration without changing core behavior.	Configuration specification and regression test.
CUS	Requires a custom model, workflow, business rule, report or extension.	Functional design, technical design, test cases and upgrade note.
INT	Requires an API, device, gateway, bank, external authority or other external service.	Interface contract, security design, error handling and reconciliation test.
POL/TBD	Depends on policy, legal interpretation, threshold, data ownership or a stakeholder decision.	Approved decision recorded in the open-items register.

List of Acronyms and Abbreviations

Abbreviation	Full form	Abbreviation	Full form
ADMS	Automatic Data Master Server	ID	Identifier / Identification
AG	Accountant General	INT	Integration
AI	Artificial Intelligence	IT	Information Technology
API	Application Programming Interface	KPI	Key Performance Indicator
AR/AP	Accounts Receivable / Accounts Payable	KPTEVTA	Khyber Pakhtunkhwa Technical Education and Vocational Training Authority
BI	Business Intelligence	MFA	Multi-Factor Authentication
BOQ	Bill of Quantities	NAVTTTC	National Vocational and Technical Training Commission
CAPEX	Capital Expenditure	NFR	Non-Functional Requirement
CFG	Configuration	OD	Open Decision
CNIC	Computerized National Identity Card	OPEX	Operational Expenditure
CNIC / B-Form	Computerized National Identity Card / Child Registration Certificate	PDF	Portable Document Format
CPF	Contributory Provident Fund	PIN	Personal Identification Number
CSV	Comma-Separated Values	PKR	Pakistani Rupee
CUS	Customization	PO	Purchase Order
CWIP	Capital Work in Progress	POL	Policy
DMS	Document Management System	PR	Purchase Requisition
DOCX	Microsoft Word Open XML Document	QR	Quick Response
EE	Employment Exchange	RFID	Radio-Frequency Identification

List of Acronyms and Abbreviations (continued)

Abbreviation	Full form	Abbreviation	Full form
EOSB	End of Service Benefits	RFQ	Request for Quotation
EOT	Extension of Time	RPO	Recovery Point Objective
ERP	Enterprise Resource Planning	RTO	Recovery Time Objective
ESS	Employee Self-Service	RTV	Return to Vendor
ETL	Extract, Transform and Load	SLA	Service Level Agreement
FBR	Federal Board of Revenue	STD	Standard
FIFO	First In, First Out	TBD	To Be Determined
FRS	Functional Requirements Specification	TVET	Technical and Vocational Education and Training
GRN	Goods Receipt Note	UAT	User Acceptance Testing
GST	General Sales Tax	USD / EUR	United States Dollar / Euro
HR	Human Resources	WBS	Work Breakdown Structure
HRM	Human Resource Management	XLSX	Microsoft Excel Open XML Workbook

Table of Contents

Document Control and Governance	50
Executive Scope and Delivery Decisions	51
<i>Requirement Classification and Change Control</i>	<i>52</i>
List of Acronyms and Abbreviations	53
Table of Contents	55
Introduction	62
Organization Overview	62
Purpose of the Document	62
General System and Customization Requirements	62
<i>System Standards</i>	<i>62</i>
<i>Paperless Operations.....</i>	<i>62</i>
<i>User Experience</i>	<i>63</i>
<i>Data Integrity.....</i>	<i>63</i>
<i>Access Rights & Approvals</i>	<i>63</i>
<i>Multi-Institute(Branches) / Multi-Currency Readiness</i>	<i>64</i>
<i>Odoo Partner Expectations</i>	<i>64</i>
Scope of the FRS	64
Purchase Management Module	66
<i>Process Overview.....</i>	<i>66</i>
<i>Functional Requirements</i>	<i>66</i>
<i>Integration Requirements.....</i>	<i>68</i>
<i>Approval Workflow Requirements</i>	<i>68</i>
<i>Audit & Traceability Requirements</i>	<i>68</i>
<i>Delivery Expectations</i>	<i>69</i>
<i>Custom Fields, View & Report Flexibility.....</i>	<i>69</i>
Inventory & Stores Management Module	70
<i>Process Overview.....</i>	<i>70</i>
<i>Organizational, Store & Location Structure</i>	<i>70</i>
<i>Item Categories, Parameters & Configuration Framework.....</i>	<i>70</i>
<i>Units of Measure & Quantity Handling</i>	<i>71</i>
<i>Receiving, Inspection Dependency</i>	<i>72</i>
<i>Institutional Inventory Movements</i>	<i>72</i>
<i>Internal Transfers, Issuing & Dispatch</i>	<i>72</i>
<i>Financial Dependency on Inventory & Inspection.....</i>	<i>73</i>
<i>Replenishment, Planning & Stock Rules.....</i>	<i>73</i>
<i>Costing & Valuation.....</i>	<i>73</i>
<i>Internal Reference, Serial & Barcode Generation.....</i>	<i>73</i>

Barcode, Scanner, Device & Printing Integration	73
Asset & Equipment Tracking	74
Operational Dependencies, Controls & Notifications	74
Custom Fields, Views & Report Flexibility	74
Delivery Expectations	74
Accounting & Budget Management Module (Pakistan Localization)	76
Government Localization & Regulatory Compliance	76
Multi-Company & Multi-Currency Future Compatibility	77
Chart of Accounts, Cost Centers & Financial Dimensions	77
Expenditure Analysis & Budget Performance Structure.....	78
Costing & Inventory Valuation (Category-Wise Rules)	78
Purchase Accounting Integration	79
Payment Methods & Financial Control	79
Bank Synchronization, Payments & Reconciliation Control	79
Payment Terms Enforcement & Financial Control (Configurable Rules).....	80
Budget Commitment Control & Approval Workflow	80
Payment Scheduling, Liability Monitoring	81
Expense Management (Approval & Accounting Control)	81
Fixed Asset Lifecycle Management (Barcode, Location, Control)	81
Budgeting & Financial Controls	82
User Rights, Approval Matrix & Audit Controls.....	82
Financial Reports & Analytics.....	82
Custom Fields, Views & Report Flexibility	83
Human Resources & Payroll Module	85
Process Overview.....	85
Organizational Structure & Workforce Configuration	85
Recruitment & Onboarding Management	85
Employee Master Data Management	86
Contract & Employment Management.....	86
Attendance & Time Management	86
Biometric & Device Integration	86
Leave Management.....	86
Payroll Management.....	87
Loans, Advances & Financial Requests	87
Gratuity/ End of Service Benefits (EOSB)	87
Offboarding & Final Settlement	88

<i>Employee Self-Service (ESS) Portal</i>	<i>88</i>
<i>Employee Record & Compliance Management</i>	<i>88</i>
<i>HR Analytics & Reporting</i>	<i>88</i>
<i>User Rights, Security & Audit Control</i>	<i>89</i>
<i>Integration with Accounting & Other Modules</i>	<i>89</i>
<i>Customization & Scope Alignment</i>	<i>89</i>
<i>Student Lifecycle Management Module</i>	<i>90</i>
<i>Process Overview and Operating Boundary.....</i>	<i>90</i>
<i>Explicitly Out of Scope</i>	<i>90</i>
<i>Training Programme, Curriculum and External Reference Setup</i>	<i>90</i>
<i>Online Admission and Eligibility Management</i>	<i>90</i>
<i>Trainee Profile, Identity and Data Consent</i>	<i>91</i>
<i>Enrollment, Batch, Capacity and Timetable Management</i>	<i>91</i>
<i>Instructor Assignment and HR Integration</i>	<i>91</i>
<i>Digital Fees and Accounting Integration.....</i>	<i>91</i>
<i>Attendance and Participation</i>	<i>91</i>
<i>Training Delivery, Formative Assessment and Competency Evidence</i>	<i>92</i>
<i>Progression, At-Risk Monitoring and Interventions</i>	<i>92</i>
<i>Industry Placement, Apprenticeship and Workplace Learning.....</i>	<i>92</i>
<i>Internal Training Completion, Withdrawal, Transfer and Exit</i>	<i>92</i>
<i>External Registration and Outcome Recording</i>	<i>93</i>
<i>Trainee Portal and Communications</i>	<i>93</i>
<i>Employment Outcomes and Alumni Follow-up</i>	<i>93</i>
<i>Dashboards and Performance Indicators.....</i>	<i>93</i>
<i>Access, Privacy, Audit and Data Retention</i>	<i>94</i>
<i>National TVET and External-System Interoperability</i>	<i>94</i>
<i>Minimum Acceptance Scenarios.....</i>	<i>94</i>
<i>Fleet Management Module</i>	<i>95</i>
<i>Process Overview.....</i>	<i>95</i>
<i>Fleet Structure, Locations & Ownership.....</i>	<i>95</i>
<i>Vehicle Master Data & Registration</i>	<i>95</i>
<i>Driver Management & HR Integration</i>	<i>95</i>
<i>Trip Movement & Utilization Tracking</i>	<i>95</i>
<i>Odometer Management</i>	<i>95</i>
<i>Fuel Management & Control.....</i>	<i>96</i>
<i>Preventive Maintenance, Repairs & Service Management.....</i>	<i>96</i>

<i>Spare Parts & Inventory Linkage</i>	<i>96</i>
<i>Costing, Budget Allocation & Accounting Integration</i>	<i>96</i>
<i>Accidents, Claim & Incident Register</i>	<i>97</i>
<i>Approval, Access Rights & Audit Control</i>	<i>97</i>
<i>Compliance & Alert Notification.....</i>	<i>97</i>
<i>Reports & Dashboards</i>	<i>97</i>
<i>Custom Fields, View & Report Flexibility.....</i>	<i>98</i>
<i>Delivery Expectation</i>	<i>98</i>
<i>Integration Requirements.....</i>	<i>98</i>
<i>Project Management - Civil Works & Development Projects.....</i>	<i>100</i>
<i>Process Overview.....</i>	<i>100</i>
<i>Project Initiation & Planning.....</i>	<i>100</i>
<i>Project Structure & Work Breakdown.....</i>	<i>100</i>
<i>Millstone & Phase Management.....</i>	<i>100</i>
<i>Project Scheduling and Time Management</i>	<i>101</i>
<i>Resource Planning & Assignment.....</i>	<i>101</i>
<i>Contractor & Vendor Management.....</i>	<i>101</i>
<i>Project Budgeting & Cost Control.....</i>	<i>101</i>
<i>Project Progress Monitoring</i>	<i>102</i>
<i>Project Documentation Management</i>	<i>102</i>
<i>Project Issue & Risk Management.....</i>	<i>102</i>
<i>Field Inspection & Monitoring.....</i>	<i>102</i>
<i>Project Performance & Monitoring</i>	<i>102</i>
<i>Reporting & Analytics.....</i>	<i>103</i>
<i>Project Dashboards</i>	<i>103</i>
<i>Integration Requirements.....</i>	<i>103</i>
<i>Diary, Dispatch & File Management System</i>	<i>104</i>
<i>Process Overview.....</i>	<i>104</i>
<i>Inward Correspondence Management</i>	<i>104</i>
<i>Outward Correspondence & Dispatch Management.....</i>	<i>104</i>
<i>Electronic File Creation & Management</i>	<i>104</i>
<i>Digital File Movement Workflow</i>	<i>105</i>
<i>File Noting & Approval Workflow</i>	<i>105</i>
<i>Document Storage & Retrieval.....</i>	<i>105</i>
<i>Alerts & Notifications</i>	<i>105</i>
<i>Document & Version Control.....</i>	<i>106</i>

Reports & Dashboards 106

User Role & Access Control 106

Security & Audit Controls 107

Integration Requirements 107

Customization & Future Scalability..... 107

Digital Signature & Electronic Approval 107

Barcode/QR Code File Tracking 107

Document Management System 108

Process Overview..... 108

Organizational Document Structure..... 108

Document Repository & Storage 108

Document Classification & Metadata..... 109

Document Uploading & Scanning..... 109

Document Version Control 109

Document Approval Workflow..... 109

Document Search & Retrieval 109

Document Access Control..... 110

Document Sharing & Collaboration..... 110

Document Retention & Archival Management 110

Alerts & Notifications 110

Reports & Dashboards 110

Security & Audit Controls..... 110

Integration Requirements..... 111

Customization & Future Scalability..... 111

Business Intelligence & Analytics Dashboards & Reference Documentation 112

Process Overview..... 112

Data Source & Integration 112

Dashboard Framework 112

Executive Management Dashboards..... 112

Operational Dashboards..... 112

Analytical Reporting 113

Pivot Table & Data Analysis..... 113

Visualization & Charts 113

KPI Monitoring 113

Alerts & Performance Indicators 114

Reference Documentation & Standardized Workflows 114

Report Export & Data Sharing	114
User Role & Access Control	114
Security & Data Governance	114
Customization & Future Scalability	114
Integration with ERP Modules	115
ERP Upgrade & Data migration	116
Process Overview	116
Existing System Overview	116
Upgrade Objectives	117
Data migration Scope	117
Biometric Attendance Integration Migration	118
Budget & Analytic Accounting Migration	118
Data validation & Reconciliation	118
Testing & User Acceptance	118
User Training & Documentation	118
Go Live & Cutover Strategy	119
Post Migration Support	119
Data migration Methodology	119
Non Functional Requirements	121
Overview	121
Measurable Service and Acceptance Baseline	121
System Performance	121
System Availability	122
Scalability	122
Security Requirements	122
Data Privacy & Confidentiality	122
Audit & Traceability	122
Data Backup	122
Disaster Recovery	122
System Integration	123
Usability Requirements	123
Reporting & Analytics Performance	123
Compliance & Standards	123
System Documentation	123
Training Requirements	123
Maintainability & Support	124

Appendix A - Indicative Odoo Fit-Gap and Delivery Approach..... 125
Appendix B - Open Decisions and Policy Inputs 126
Appendix C - FRS Completion Checklist 127
Appendix D - Product Capability References..... 128

Introduction

This Functional Requirements Specification (FRS) defines KPTEVTA's business processes, functional needs, controls, integrations and implementation expectations for the Odoo ERP upgrade and expansion.

It provides a common baseline for management, process owners, internal users, the implementation partner and assurance teams.

The approved FRS shall guide fit-gap analysis, solution design, configuration, development, migration, testing, training, cutover and subsequent controlled enhancements.

Organization Overview

KPTEVTA (Khyber Pakhtunkhwa Technical Education and Vocational Training Authority) is a public-sector organization responsible for technical and vocational education and training delivery across Khyber Pakhtunkhwa, Pakistan.

The Authority oversees technical institutes, vocational training centers and training programmes intended to build skills aligned with workforce and industry needs.

KPTEVTA is modernizing administrative, training, financial and institutional operations through an integrated Odoo-based ERP to improve governance, data quality, monitoring and service delivery.

Purpose of the Document

This FRS aims to:

- Document all business requirements in a clear and structured format.
- Align Odoo ERP functionalities with KPTEVTA's departmental workflows.
- Clarify expected integrations, validations, approvals, and reporting rules across modules.
- Provide a central reference for onboarding ERP partner/vendor and internal teams.
- Ensure that all configurations and custom developments support the Organization's long-term operational and strategic goals.

This document forms the basis for ERP design, implementation, user training, UAT, future upgrades, and partner evaluations.

General System and Customization Requirements

- Maintain a signed fit-gap register linking each requirement to STD, CFG, CUS, INT or POL/TBD classification.
- Assign a requirement owner, priority, acceptance scenario and evidence type before build commitment.
- Prohibit direct modification of Odoo core code; extensions shall use supported module inheritance and documented interfaces.
- Maintain separate development, test/UAT, training and production environments with controlled promotion between them.
- Record all assumptions and policy thresholds in the approved open-items register.

To ensure a stable, scalable, and future-ready ERP system, the following general requirements apply:

System Standards

- All configurations and custom extensions shall be maintainable, upgrade-aware, documented and covered by regression tests.
- The target Odoo release and edition shall be frozen at solution-design sign-off. Any later version change requires impact assessment and approval before go-live.
- Architecture should support future enhancements with minimal rework.

Paperless Operations

- The target solution shall support KPTEVTA's administrative, training and operational workflows while preserving clear ownership, approvals and audit evidence.
- The ERP system shall support fully digital processes to improve transparency, efficiency, and audit readiness within institutional operations.
- Barcode / QR-enabled operations must be implemented for:

- Asset registration, verification, and physical asset audits
- Inventory receiving and issuance at institutes and warehouses
- Store transfers between institutes and regional offices
- Training equipment tracking and allocation
- Trainee identity cards and enrollment verification
- Biometric attendance device mapping and identification
- File and document tracking within the digital document management system

User Experience

- Forms must be simple, clean, and user-friendly for all staff levels.
- Error notices and restriction messages must be clear and easy to understand.

Data Integrity

- Administrative, financial, training and institutional reporting
- Strict role-based access control shall be enforced for critical master data including, but not limited to:
 - Employee master records
 - Trainee and instructor master records
 - Institute and department master data
 - Training programs, trades, and course structures
 - Budget heads and financial accounts
 - Asset and inventory master data
 - Vendor and service provider records
- The system shall maintain a comprehensive transaction history/Audit Trails clearly recording:
 - User performing the action
 - Date and time of transaction
 - Nature of change (create, update, approve, cancel, or delete)
 - Approval and workflow status

Access Rights & Approvals

- The ERP system shall enforce role-based access control across all KPTEVTA organizational units including Head Office, Regional Offices/Employment Exchanges, Institutes, and Training Centers to ensure data security, operational control, and segregation of duties.
- User permissions shall be configured according to defined roles such as:
 - System Administrator
 - Finance & Accounts Staff
 - HR & Payroll Officers
 - Institute Managers
 - Store & Inventory Officers
 - Training and institute staff
 - Monitoring & Evaluation Officers
 - Senior Management / Approving Authorities
 - Institutes/Branch
 - Employment Exchange
- Approval workflows must be enforced within the system for, but not limited to, the following operations:

- Budget preparation, allocation, revision, release, and surrender approvals
 - Payroll processing, salary revisions, allowances, deductions, and final payroll validation
 - Employee lifecycle actions including recruitment, transfers, promotions, training nominations, and leave approvals
 - Purchase requisitions, procurement approvals, and purchase orders exceeding defined financial thresholds
 - Vendor registration and contract approvals
 - Financial transactions including billing, invoicing, payments, journal entries, and expense claims
 - Credit utilization against approved budgets, grants, or project allocations
 - Inventory transactions including stock adjustments, inter-institute transfers, and asset issuance
 - Asset acquisition, transfer, write-off, and disposal approvals
 - Fleet usage approvals, vehicle allocation, and maintenance expenditures
 - Trainee admission, enrollment, attendance correction, progression, internal training-completion status and verification of externally received outcomes
 - Biometric attendance overrides or manual attendance adjustments
 - System configuration changes and master data modifications
 - Any exception or override transaction requiring higher management authorization
- All approvals shall be executed electronically within the ERP system and must maintain a complete audit trail, recording approving authority, approval date/time, and workflow history for audit and compliance purposes.

Multi-Institute(Branches) / Multi-Currency Readiness

- The ERP shall support Head Office, institutes, regional or field offices and future training centers through an approved company/branch, warehouse and analytic-account architecture.
- Multi-currency support shall be available to manage donor-funded projects, international procurements, and externally financed training programs where applicable.

Odoo Partner Expectations

To ensure successful ERP upgrade and protect KPTEVTA's operational interests:

- The implementation partner must thoroughly review and understand this FRS before initiating system configuration or development activities.
- Any deviation, assumption, or scope change must be formally documented and approved by KPTEVTA.
- Solution design shall prioritize standard Odoo capabilities and sustainable configuration. Every custom extension must be operationally justified, upgrade-aware and approved through change control.
- The partner shall provide configuration records, functional and technical designs for custom items, test evidence, training material, deployment documentation and complete handover artifacts.

Scope of the FRS

This FRS covers the following business capabilities and their approved cross-module integrations:

- **Purchase and Procurement Management:** Requisitions, approvals, procurement planning, vendor RFQs, quotation evaluation, purchase orders, receipts, inspection dependency and purchase-to-pay traceability.
- **Inventory, Stores, Quality Receiving and Assets:** Warehouses and locations, receipts, holds, inspection, transfers, issuance, barcode/QR operations, serial tracking, asset registration and stock valuation integration.
- **Accounting and Budget Management:** Public-sector accounting, analytic dimensions, budgets and commitments, payables, banking, assets, taxation, approvals and financial reporting.
- **Human Resources and Payroll:** Organization structures, recruitment, employee records, service history, attendance, leave, payroll, loans, benefits, onboarding, offboarding and employee self-service.

- **Student Lifecycle Management:** Admissions, enrollment, fees, batches, instructors, attendance, training delivery, formative evidence, progression, interventions, completion, external reference data, placement and alumni outcomes. Official examination and credential issuance are excluded.
- **Fleet Management:** Vehicles, drivers, trips, odometers, fuel, maintenance, incidents, compliance documents and cost allocation.
- **Civil Works and Development Projects:** Project initiation, work breakdown, schedules, milestones, contractors, budgets, progress, inspections, risks, documentation and performance reporting.
- **Diary, Dispatch and File Movement:** Inward/outward correspondence, electronic files, noting, routing, approvals, QR tracking and audit history.
- **Document Management:** Central repository, metadata, versioning, access, sharing, retention, archiving and linkage to ERP records.
- **Business Intelligence and Analytics:** Governed KPIs, dashboards, pivots, management reporting and approved future analytics.
- **ERP Migration and Cutover:** Source assessment, extraction, mapping, cleansing, loading, reconciliation, UAT, cutover and stabilization from Flectra 1.6 to the approved Odoo target.
- **Cross-cutting Non-functional Requirements:** Security, performance, availability, recoverability, privacy, auditability, integration, usability, documentation and support.

Scope exclusions or assumptions stated in a module take precedence over generic wording elsewhere. Conflicts shall be raised through change control and resolved before configuration or development begins.

Purchase Management Module

Process Overview

KPTEVTA's procurement operations include training equipment, laboratory tools, IT hardware, furniture & fixtures, consumables, office supplies, civil works materials, maintenance items, vehicles, and institutional infrastructure requirements. Procurement can be triggered through:

- Minimum stock level replenishment
- Budget allocation and approved procurement plans
- Department Purchase Requisitions (PR)
- Development projects or special operational requirements

The procurement workflow consists of:

- Purchase Requisition
- PR approval
- RFQ issuance
- Vendor quotation evaluation
- Purchase Order (PO) creation
- PO approval
- Goods Receipt Note (GRN)
- Inspection and verification of received items
- Vendor bill processing
- Inventory update and financial posting

Procurement items may be quantity-based (Units/Pieces), asset-based (Equipment/Vehicles), or service-based (Works and Services). Proper handling of asset tagging, quantity verification, specification compliance, warranty details, and budget utilization tracking is essential.

Functional Requirements

Purchase Requisition (PR)

- Users across Head Office, Regional Offices, and Institutes must be able to create Purchase Requisitions (PRs) for equipment, laboratory tools, IT hardware, furniture & fixtures, consumables, civil works materials, maintenance items, services, vehicles, and other operational requirements.
- Each PR must capture complete details including item description/specifications, required quantity, Unit of Measure (UoM), required delivery date, institute/location, budget head, cost center, and operational justification.
- The PR approval workflow must be configurable and enforce hierarchical approvals (Department/Institute to Procurement Section to Finance & Budget Section to Competent Authority/Management) based on defined financial thresholds.
- Approved PRs must seamlessly convert into RFQs and Purchase Orders (POs) without data duplication, ensuring full traceability from requisition to final procurement and financial posting.
- The system must support controlled visibility of PRs, allowing users to view their own requisitions while providing extended access to authorized supervisory and procurement roles based on defined access rights.

Procurement Planning & Replenishment

- The system must maintain minimum stock level, maximum stock level, reorder point, safety stock, and defined lead times for inventory items across Head Office and Institutes.
- Automatic replenishment suggestions must be generated when stock levels fall below defined thresholds, subject to budget availability.

- Planning calculations must consider available stock, reserved quantities, approved purchase orders, and confirmed departmental requirements.
- Separate planning rules must be configurable for training equipment, consumables, maintenance items, civil works materials, and other institutional categories.

RFQ Management

- RFQs must include item description/specifications, quantity, UoM, required delivery date, institute/location, and last purchase price reference.
- RFQs must support attachment of supporting documents such as technical specifications, approved estimates, drawings, and evaluation documents.
- Vendor quotations must be stored within the system for comparison, evaluation, and approval purposes.
- Approved RFQs must convert into Purchase Orders (POs) without data loss while maintaining full procurement traceability.

Purchase Order (PO)

- PO confirmation must not be allowed until approvals are completed.
- Purchase Orders (POs) must contain complete commercial and technical details including item specifications, quantity, price, delivery terms, and payment conditions.
- Management approval shall be mandatory for material and equipment Purchase Orders above defined financial limits.
- Service and maintenance Purchase Orders may follow a simplified approval workflow as per approved authority levels.
- The system must maintain PO revision history and audit logs for all changes.
- Purchase Orders shall not be confirmed until all required approvals are completed within the system.

Goods Receipt Note (GRN)

- GRN must record received quantity, item details, institute/store location, and verification status of delivered goods.
- The system must support partial receipt of items against a Purchase Order.
- Received items must be verified against approved specifications and quantities before acceptance.
- GRN must be automatically linked with the corresponding Purchase Order and Vendor Bill for financial processing.
- Received items shall remain unavailable for issue or use until the required inspection or verification has been approved.

Quality Control Requirements

Inspection must validate attributes such as:

- Compliance with approved technical specifications
- Quantity and model verification
- Physical condition and damage assessment
- Warranty documentation and serial number verification
- Functionality testing (where applicable for equipment)

Inspection rules, measurements, evidence and acceptance criteria shall be implemented through the approved Odoo Quality capability or an agreed inspection extension. The capability is part of scope wherever a receipt is subject to a quality hold.

Inspection Statuses:

- Accepted

- Accepted with observations
- Hold for clarification
- Rejected
- Return to Vendor (RTV)

Non-Regular / Special Purchases

- PRs may be used for non-stock, custom, or urgent needs.
- Temporary or ad-hoc items must be supported.
- Category- and value-based approval logic must be supported.

Access Rights & Security

System must support:

- Section/Institute-level Purchase Requisition (PR) creation
- Purchase Order (PO) creation restricted to authorized Procurement staff
- Management approval rights based on defined authority levels
- Category-based access control for procurement and inventory operations
- Controlled document visibility (own documents vs authorized full access)
- Restricted deletion or modification of records with mandatory audit logging and traceability

Integration Requirements

Inventory

- GRN must automatically update stock levels at institute/store locations.
- Inspection and verification approval shall control item availability for use or issuance.
- Asset tagging, serial number, and item tracking must be integrated with inventory records.

Accounting

- Maintain complete integration and traceability from Purchase Order to receipt/GRN to vendor bill.
- Procurement transactions must validate against approved budget allocations.
- Automatic financial posting and expense recognition upon bill validation.

Approval Workflow Requirements

- The system must support a configurable Purchase Requisition (PR) approval hierarchy based on organizational structure and financial authority levels.
- Competent authority approval shall be required for material and equipment Purchase Orders exceeding defined financial limits.
- Simplified or exception-based approval workflows may be configured for service, maintenance, or low-value procurements as per policy.
- Category-based and value-based approval rules must be enforceable to ensure compliance with procurement and financial regulations.
- An emergency procurement approval pathway must be available for urgent institutional needs, with mandatory post-facto documentation and audit trail.

Audit & Traceability Requirements

The system must maintain audit logs for all procurement transactions including PR, RFQ, PO, GRN, and Inspection activities.

Purchase Order revision history must be preserved with clear record of changes, approving authority, and timestamps.

Item-level traceability must be maintained including asset tags, serial numbers, batch details (where applicable), and institute allocation history.

All procurement processes must comply with KPTEVTA's financial rules, procurement policies, and government audit

requirements.

Delivery Expectations

- Procurement configuration rules including approval limits, budget validation, and costing controls must be configurable within the system.
- Standard item price lists, vendor agreements, and procurement reference pricing must be implemented and maintained.
- Item receiving and inspection workflows must be fully implemented before stock acceptance.
- Access rights and approval workflows must align with KPTEVTA organizational hierarchy and financial authority structure.
- The complete procurement lifecycle (PR to RFQ to PO to GRN to Vendor Bill to Payment) must function seamlessly within the ERP system.
- Traceability, audit logging, and compliance monitoring features must be enabled across all procurement activities.
- User training, operational manuals, and system documentation must be provided as part of implementation deliverables.
- The system must remain scalable and adaptable to support future institutes, projects, and operational expansion.

Custom Fields, View & Report Flexibility

To ensure full alignment with KPTEVTA's operational, administrative, and compliance requirements, the system must support the addition of organization-specific fields and layout adjustments within procurement workflows. These configurations shall form part of the approved implementation scope.

Requirements

- The system must allow addition of custom fields in PR, RFQ, PO, GRN, Inspection, and related procurement forms.
- Form views must be configurable to include institute-specific sections, budget references, approval details, and mandatory fields.
- List (tree) views must support additional operational columns such as institute, project, budget head, and approval status.
- PDF print formats including RFQ, PO, GRN, and inspection documents must be customizable as per KPTEVTA standards.
- Excel/CSV export functionality must support inclusion of all custom and analytical fields.
- Pivot tables, search views, dashboards, and graphical reports must support extended analytical fields for management reporting.
- Each proposed customization shall be classified, estimated and approved. Listing a requirement in this FRS does not by itself classify it as standard configuration.
- The system must allow future addition of fields, layouts, and reporting adjustments without structural limitations.
- User documentation and training materials must include all customized fields, views, and reporting configurations.

Inventory & Stores Management Module

Process Overview

The Inventory and Stores Management module shall manage material and asset movements, including procurement receipts, storage, inspection holds, internal transfers and issuance to institutes and departments.

The module shall integrate with Procurement, Accounting & Budget Management, and Asset Management to ensure controlled stock handling and real-time inventory visibility across KPTEVTA.

The system must support:

- Equipment, tools, consumables, furniture and fixtures, IT hardware, training and instructional materials, and institutional assets
- Quantity-based and asset-based inventory tracking
- Institute-wise stock management and location-based storage
- Paperless, barcode/QR-driven stock and asset operations
- End-to-end traceability of items from receipt to issuance or disposal
- Strong dependency and approval controls for stock movement and adjustments

All inventory processes must be configurable, scalable, and aligned with KPTEVTA's institutional governance and audit requirements.

Organizational, Store & Location Structure

Multi-Institute & Multi-Store Support

- Support a single centralized ERP with multiple institutes under KPTEVTA.
- Support multiple stores/stock locations within the same institute (e.g., main store, lab store, workshop store).
- Support stores across multiple geographic locations including Head Office, and Field Institutes.
- Support inter-institute and inter-store stock transfers with proper approval and tracking.
- All transfers must follow defined approval workflows, tracking controls, and full traceability rules.
- System design must allow addition of new institutes or stores in the future without structural redesign.

Location Hierarchy & Operational Restrictions

Store locations must be hierarchically structured and configurable, including (but not limited to):

- Receiving / Incoming Store
- Inspection / Verification Hold
- Main Store / Central Storage
- Department / Lab / Workshop Store
- Asset Storage Location
- Scrap / Condemned Items Store
- Dispatch / Issuance Area

Each location must enforce:

- Allowed transaction types (receipt, transfer, issue, adjustment)
- Item or asset category restrictions
- Role-based access rights and store responsibilities
- Movement dependency and approval rules

Unauthorized movement of items between locations must be restricted and controlled by the system.

Item Categories, Parameters & Configuration Framework

Item Category Hierarchy

Inventory items must be organized using a configurable category hierarchy such as:

- Equipment & Training Machinery
- IT Equipment & Electronics
- Furniture & Fixtures

- Consumables & Office Supplies
- Laboratory & Workshop Tools
- Vehicles & Fleet Items
- Assets / Tools (where applicable)

Category configuration must control:

- Costing and expense classification
- Valuation method
- Tracking method (serial number / asset tag / none)
- Inspection or verification requirements
- Replenishment and minimum stock rules
- Allowed inventory operations (receipt, transfer, issue, disposal)

Item Structure & Configurator Support

The system shall support the flexible item structures used in KPTEVTA operations, including:

- Equipment and machinery
- IT devices and electronic equipment
- Laboratory and workshop tools
- Furniture and fixtures
- Training Materials

Each item type may be purchased, stored, transferred, issued to institutes, or registered as an asset. The system must support a configurable item framework allowing:

- Attribute-based variants (e.g., model, brand, capacity)
- Parameter-based configurations (e.g., specifications, version)
- Standard and institute-specific specifications
- Range-based inputs where applicable
- Auto-captured identifiers such as serial number or asset tag

Typical parameter groups (as applicable) include:

- Item category and type
- Model and manufacturer
- Serial number / asset tag
- Warranty period
- Technical specifications
- Location or institute allocation

All parameters must be:

- Configurable (not hard-coded)
- Reusable across Procurement, Inventory, and Asset Management
- Able to control stock tracking, asset registration, and reporting rules

Detailed configuration rules shall be finalized during system implementation.

Units of Measure & Quantity Handling

- Support multiple Units of Measure:
 - Units/Pieces (equipment, furniture, tools)
 - Sets/Kits (training equipment sets)
 - Liters/KG (consumables and maintenance items)

- Asset-based tracking (vehicles and tagged assets)
- The system must support quantity and asset-based handling where required.
- Configurable and auditable Unit of Measure (UoM) conversions must be enforced.
- Quantity tolerances must be configurable per item or category during receiving and verification processes.

Receiving, Inspection Dependency

Receiving Process

All receipts must be processed through controlled receiving operations at Head Office and Institute stores.

The system must support receiving processes for:

- Goods Receipt (GRN) against Purchase Orders
- Inter-institute or inter-store transfers
- Asset and equipment deliveries
- Store issuance and dispatch operations

The system must capture:

- Received quantity
- Item verification status
- Store/location details

Variance between supplier delivery documents, approved Purchase Orders, and actual received quantities must be automatically recorded, logged, and validated against configurable tolerance limits.

Inspection & Verification Dependency

- All received items must first move to an Inspection / Verification Hold location.
- GRN completion shall depend upon inspection or verification approval.
- Only verified items shall become available for store issuance or asset registration.
- Rejected or non-compliant items must be routed to:
 - Return to vendor
 - Scrap/Condemnation
 - Replacement or Re-delivery (where applicable)

Detailed inspection procedures shall be defined within inventory and procurement processes, and the system must strictly enforce inspection approval before items become usable stock.

Institutional Inventory Movements

Inventory movements must follow controlled and traceable institutional processes:

- Issue of equipment and consumables to departments or institutes from verified stock
- Barcode/QR or asset-tag validated issuance where applicable
- Recording of issued quantities, receiving department, and responsible officer
- Support inter-institute and inter-department stock transfers
- Return of unused or damaged items back to store
- Mandatory verification before items become available for operational use

Inventory management must support controlled stock handling, asset accountability, and full traceability across KPTEVTA institutes.

Internal Transfers, Issuing & Dispatch

- Internal transfers must be barcode/QR-driven and approval-controlled.
- Inter-institute and inter-store transfers must be fully traceable.
- Issuance of items must be created only against approved requisitions or authorized requests.

Issuance must be blocked if:

- Stock is unavailable
- Inspection/verification is not completed
- Required approvals are not completed

Dispatch & Movement Tracking

- Support dispatch data capture for inter-institute transfers and asset movement.
- Support quantity-based shipment planning.
- Reflect asset tags, serial numbers, and item details in dispatch documents.
- Support scanners for confirmation of issue and transfer operations.

Issue/transfer documents must be acknowledged and recorded by the receiving institute or department.

Financial Dependency on Inventory & Inspection

- Vendor bills must be processed only for:
 - Received quantities
 - Verified/accepted quantities
- Inspection-hold or rejected items must not be processed for payment.
- Partial receipts must result in partial bill validation aligned with verified quantities.

Replenishment, Planning & Stock Rules

- Maintain minimum and reorder levels for frequently used items and consumables.
- Replenishment planning must consider:
 - Available stock
 - Reserved stock
 - Incoming purchase receipts
 - Approved departmental/sections/Institute requirements

Costing & Valuation

- Support category-based costing methods (Average, FIFO, etc.) as per accounting policy.
- Support landed cost allocation including freight, transport, installation, and related charges.
- Inventory valuation must align with Accounting & Budget reporting requirements.

Internal Reference, Serial & Barcode Generation

The system must support automatic generation of internal references, serial numbers, asset tags, and barcodes.

- Reference formats must be configurable based on:
 - Item category
 - Institute/location
 - Operation type
 - Date or sequence
- Prefixes and numbering rules must be configurable
- Barcodes/QR must be generated for:
 - Inventory items
 - Asset tags
 - Batches (where applicable)
 - Transfers and issuance documents

Barcode, Scanner, Device & Printing Integration

- All inventory operations must support barcode/QR-enabled processes.

- Support handheld scanners and mobile devices
- Support wireless barcode printers
- Support direct printing of:
 - Asset labels
 - Inventory labels
 - Transfer/issue vouchers

Integration with inspection verification processes must be supported where applicable.

Asset & Equipment Tracking

- Equipment and tagged assets must be tracked individually.
- Assets may be transferred, assigned, maintained, or disposed.
- Fixed assets must support:
 - Barcode/asset tagging
 - Location tracking
 - Usage/assignment history
 - Maintenance linkage

Operational Dependencies, Controls & Notifications

Overview

The system must enforce operational dependencies and provide role-based notifications to ensure coordination across departments and institutes.

Functional Requirements

- No inspection approval to no usable stock
- No stock to no issuance
- No verified quantity to no payment processing
- Negative stock must be prevented
- Operations must respect budget and approval control

Notifications

The system must notify responsible users for pending or completed actions, including:

- GRN created to Inspection notified
- Inspection approved to Store notified
- Transfer initiated to Receiving institute notified
- Issuance completed to Department notified
- Bill processed to Finance notified
- Pending approvals to Relevant authority notified

Notifications must be configurable, visible in dashboards, and logged.

Custom Fields, Views & Report Flexibility

The Inventory and Asset capability shall support approved organization-specific fields across forms, list views and reports.

Extensions shall follow the requirement-classification, change-control, documentation and regression-test rules defined in this FRS.

Delivery Expectations

- Fully paperless, barcode/QR-enabled operations
- Accurate control of quantities and asset accountability
- End-to-end traceability from receipt to issuance or disposal
- Scalable configuration supporting new institutes and expansion

- Complete documentation and user training

Accounting & Budget Management Module (Pakistan Localization)

The Accounting, Budget & Asset Management module shall govern KPTEVTA's complete financial lifecycle including government accounting compliance, budget allocation and control, receivables and payables management, banking operations, asset lifecycle management, payroll integration, and consolidated financial reporting.

The system shall be designed for KPTEVTA Head Office and field institutes under the current scope, while remaining future-compatible for:

- Expansion to additional institutes or regional offices
- Multi-location financial consolidation
- Multi-currency transactions for donor-funded or externally financed projects

Asset lifecycle management shall be integrated within Accounting to support asset capitalization, depreciation, transfers, revaluation, and disposal with full financial traceability.

Accounting must integrate tightly with Procurement, Inventory, Asset Management, HR & Payroll, Fleet Management, Project Management, and Banking to ensure real-time, controlled, and audit-ready financial operations aligned with government financial rules and audit requirements.

Government Localization & Regulatory Compliance

The system must support Government of Pakistan financial regulations, provincial financial rules, and audit compliance requirements in a structured and auditable manner.

Tax & Statutory Compliance

- Tax configuration must be aligned with applicable federal and provincial tax rules (e.g., GST, withholding tax, income tax deductions, etc.).
- Accurate tax calculation must be applied on purchases, services, payroll deductions (where applicable), and other taxable transactions.
- Full tax audit trail must be maintained per invoice and per transaction line.
- Tax reporting views must allow validation and analysis by:
 - Tax type / tax code
 - Vendor or service provider
 - Invoice date vs posting date
 - Budget head or expense category (where required for analysis)
- The system must support tax adjustments, corrections, and reversals with proper approval workflows and complete audit logs.

Digital Invoicing & Record Compliance

The system must support compliant invoice generation and financial record management, including:

- Standardized invoice formats aligned with government financial and audit requirements
- Controlled invoice numbering, sequencing, and reference management
- Automatic timestamping and structured financial transaction records
- Credit note and adjustment linkage with full traceability to original invoices
- Secure record retention with audit-ready financial logs
- Readiness for future integration with government digital reporting or e-invoicing systems where applicable

FBR & Government Accounting Compliance

The system must support compliance with Federal Board of Revenue (FBR) regulations and Government of Pakistan public-sector financial management standards in a structured and auditable manner.

FBR Tax Compliance

- Support applicable tax configurations including GST, withholding tax, income tax deductions, and service taxes as per prevailing FBR rules.
- Automatic calculation of taxes on purchases, services, contracts, and vendor payments.

- Maintain complete tax audit trail for each financial transaction and invoice line.
- Provide tax reporting views enabling validation by:
 - Tax type / tax code
 - Vendor or contractor
 - Invoice date vs posting date
 - Expense or budget category
- Support tax adjustments, reversals, and corrections with approval workflows and audit logging.

Government Accounting & Audit Compliance

- Financial processes must align with Government Accounting Rules, Provincial Financial Rules, and audit requirements applicable to KPTEVTA
- Support budget-controlled accounting ensuring expenditures cannot exceed approved allocations.
- Maintain full traceability from Budget to Procurement to Payment to Accounting Entry.
- Provide audit-ready documentation including vouchers, approvals, supporting documents, and transaction history.
- Support integration readiness with government financial systems (e.g., AG or future provincial financial platforms) where required.

Record Retention & Transparency

- Secure storage of financial records with controlled access rights.
- Maintain electronic logs for approvals, postings, and financial modifications.
- Ensure availability of historical data for internal audit, external audit, and regulatory inspections.

Multi-Company & Multi-Currency Future Compatibility

Multi-Company Ready

System design must support adding new institutes, regional offices, or special project units in future without structural redesign, including:

- separate or shared chart of accounts
- Separate or consolidated financial reporting per institute
- Institute-wise or centralized chart of accounts (as per policy)
- Inter-institute fund transfers and expense allocations
- Controlled inter-unit journal entries with approval workflows
- Consolidated provincial-level financial reporting capability

Multi-Currency Ready

System must support multi-currency operations including:

- Vendor or donor transactions in multiple currencies (e.g., PKR, USD, EUR, etc., where applicable)
- Controlled currency rate updates with restricted override rights
- Automatic exchange gain/loss posting
- Period-end foreign currency revaluation entries
- Foreign currency aging reports and settlement tracking

Chart of Accounts, Cost Centers & Financial Dimensions

The system must support a structured public-sector financial model including:

- Khyber Pakhtunkhwa Government-aligned Chart of Accounts hierarchy suitable for KPTEVTA operations
- Cost center hierarchy based on Head Office, Regional Offices, Employment Exchanges, Institutes, Departments, and functional units

- Analytic dimensions for reporting and monitoring, such as:
 - Institute / Training Center /Employment Exchange
 - Budget Head / Funding Source
 - Project / Development Scheme
 - Program / Trade Category
- Revenue and expenditure classification aligned with government accounting, budget control, and audit requirements

Expenditure Analysis & Budget Performance Structure

The system must support institute-wise and category-wise visibility of:

- Budget allocation
- Actual expenditure
- Committed expenditure
- Remaining budget balance
- Variance analysis

Requirements:

- Mapping of expense categories to budget heads and accounting codes
- Reporting by:
 - Institute / Regional Office/Employment Exchange
 - Budget Head
 - Project / Development Scheme
 - Department / Function
 - Funding Source
- Ability to analyze expenditure across:
 - Recurring operational expenses
 - Development and civil works projects
 - Asset acquisition
 - Payroll and HR expenses

Costing & Inventory Valuation (Category-Wise Rules)

The system shall support costing and valuation rules aligned with KPTEVTA's approved public-sector financial and audit policies:

Costing Method by Category

- Costing method must be definable per inventory category (e.g., FIFO / Average Cost) in accordance with approved accounting policies.
- Inventory valuation must correctly reflect quantity-based items (units, sets, consumables) and asset-based items with proper financial impact upon receipt and capitalization.

Landed Cost

- Landed costs such as freight, transportation, installation, taxes, and other related charges must be allocatable to inventory or capitalized assets where applicable.

Negative Stock / Valuation Control

- The system must prevent unauthorized negative stock movements and uncontrolled valuation entries in accordance with defined internal control policies and access rights.

Purchase Accounting Integration

The system must support controlled and fully integrated purchase-to-payment accounting processes:

- Vendor bills must be linked to Purchase Orders and GRNs with configurable matching controls (2-way / 3-way matching).
- Service bills, maintenance bills, and contract payments must be supported with approval workflows.
- Vendor advances and advance adjustments must be tracked and reconciled.
- Vendor credit notes must be supported with proper financial impact and traceability.
- Landed costs must be allocated appropriately and reflected in inventory or asset valuation.
- Cost center / budget head allocation must be mandatory where applicable.
- Capital equipment purchases must automatically trigger asset creation and capitalization rules.
- Payment processing must be blocked if budget allocation or required approvals are not completed.

Payment Methods & Financial Control

The system must support structured and controlled government payment processes:

Standard Payment Modes

- Bank transfer
- Approved banking-portal integration, subject to bank interface availability and security approval
- Cross cheque
- Pay order / bank draft (where applicable)
- Approved electronic payment channels, including Raast/QR or 1Link interfaces where provider contracts and APIs are available

Advance & Defer Payment Handling

The system must support controlled financial scenarios including:

- Vendor advance payments
- Advance adjustment against bills
- Retention money handling (for civil works/projects)
- Deferred payment tracking
- Installment-based payments (where contractually defined)
- Security deposit handling (where applicable)

These must link to:

- Vendor/Partner ledger
- Bank transactions
- Budget head / cost center
- Relevant approvals and supporting documents
- Project or civil works references (if applicable)

Bank Synchronization, Payments & Reconciliation Control

Bank Synchronization

The system must support structured bank reconciliation processes including:

- Bank statement import (API integration or secure file-based upload)
- Automated matching suggestions between bank entries and system transactions
- Partial matching of payments and receipts
- Suspense account handling for unmatched entries
- Full reconciliation audit trail with traceability

Reconciliation Approval & Access Control

- Reconciliation activities must be restricted to authorized finance users.
- Approval workflow must be configurable for reconciliation validation and final confirmation.
- Backdated entries, manual adjustments, or overrides must be controlled through access rights and logged.
- All reconciliation modifications must be fully traceable (user, date, time, and nature of change).

Payment Processing

- Payment creation and posting must follow defined approval workflows aligned with financial authority levels.
- Batch payments must be supported where required.
- Payment references must be linked to corresponding vendor bills, invoices (if applicable), and bank transactions for complete traceability.

Payment Terms Enforcement & Financial Control (Configurable Rules)

The system must support flexible and policy-driven payment terms including:

- Advance payment to vendors
- Partial advance with balance payment
- Payment upon verified delivery
- Deferred payment terms (30/60/90 days or as per contract)
- Milestone-based payments (for civil works/projects)
- Installment-based payments
- Annual advance payments with phased service utilization (where applicable)

Operational Restriction Rules

The system must allow configurable financial enforcement controls, such as:

- Block vendor payment processing if required approvals are not completed
- Block payment if budget allocation is insufficient
- Block payment if GRN/inspection is not approved
- Restrict advance adjustment beyond approved limits
- Restrict payment if vendor documentation is incomplete
- Prevent expenditure posting if it exceeds approved budget threshold

Rules must be configurable per:

- Vendor category
- Contract type
- Budget head / funding source
- Project / development scheme

All system blocks, overrides, and manual interventions must be logged with full audit traceability.

Budget Commitment Control & Approval Workflow

The system must support controlled budget utilization and commitment tracking including:

- Budget allocation per institute / department / project
- Commitment tracking based on:
 - Approved Purchase Requisitions
 - Confirmed Purchase Orders
 - Received goods/services
 - Posted vendor bills
- Automatic budget consumption calculation
- Temporary budget reallocation or enhancement via approval workflow

- Alerts when budget thresholds are reached
- Hard block when expenditure exceeds approved allocation (as configured)

Approval & Override Controls

- Budget override must require approval based on defined authority levels
- Override history must be fully audit-logged
- Blocking rules must be enforceable at:
 - PR approval
 - PO confirmation
 - Vendor bill validation
 - Payment processing -

Payment Scheduling, Liability Monitoring

The system must support:

- Installment-based payments for projects or contracts
- Due-date tracking for vendor liabilities
- Partial payment allocation
- Adjustment of payment plans with approvals
- Aging-based payable dashboards

Reports and dashboards must show:

- Outstanding vendor liabilities
- Upcoming due payments
- Budget utilization vs commitments
- Project-based expenditure tracking

Expense Management (Approval & Accounting Control)

The system must support:

- Configurable expense categories linked to appropriate accounting heads and budget classifications.
- Approval workflows based on expense amount, category, and defined financial authority levels.
- Mandatory cost center / institute allocation for all expense postings.
- Automated budget availability checks before expense approval or posting (where enabled).
- Employee advances, advance adjustments, and settlement tracking with proper documentation and approval controls.
- Complete audit trail for expense submissions, approvals, modifications, and accounting entries.

Fixed Asset Lifecycle Management (Barcode, Location, Control)

The system must support full asset lifecycle management, including:

Asset Creation & Capitalization

- Assets must be created manually or automatically from approved purchase transactions.
- Capital Work in Progress (CWIP) to asset conversion must be supported for civil works and development projects.
- Asset categories and depreciation methods must be configurable as per accounting policy.
- Capitalization must follow defined approval workflows before activation.

Asset Barcoding & Sticker Printing

- Automatically generate a unique asset ID and barcode.
- print asset stickers/labels

- barcode scanning for verification and physical audit

Asset Location & Transfer

- Assets must be assignable to institute, department, or responsible officer.
- Asset transfers between institutes, departments, or locations must require approval and maintain traceability.
- System design must support future inter-institute or special project transfers.
- Asset status must be trackable (in use / under maintenance / transferred / disposed).

Depreciation, Disposal & Control

- Automated depreciation posting must be supported as per configured schedules.
- Partial disposal, write-off, or sale of assets must be supported with proper accounting treatment.
- Disposal must follow approval workflows.
- All asset lifecycle changes must maintain a complete audit trail.

Budgeting & Financial Controls

The system must support:

- Budget preparation and allocation per institute, department, cost center, and project.
- Separate budgeting for Capital Expenditure (CAPEX) and Operational Expenditure (OPEX).
- Configurable approval workflows for budget creation, revision, release, and reallocation.
- Real-time budget vs actual reporting including commitments and pending liabilities.
- Automated alerts and configurable blocking controls in case of budget overruns or threshold breaches.

User Rights, Approval Matrix & Audit Controls

The system must enforce segregation of duties and controlled approvals:

- Role-based access control must be enforced for:
 - Journal entry creation and posting
 - Vendor bill creation and validation
 - Payment creation and approval
 - Credit notes and adjustments
 - Asset creation, capitalization, transfer, and disposal
 - Bank reconciliation
 - Financial period closing
 - Chart of Accounts Creation
- Period lock controls must prevent posting or modification of transactions in closed accounting periods.
- Transaction deletion must be restricted; reversal workflows must be used instead of deletion for financial integrity.
- A complete audit trail must be maintained for all critical financial transactions, approvals, modifications, and overrides.
- Approval thresholds must be configurable based on transaction amount, expense category, budget head, or project type.

Financial Reports & Analytics

The system shall produce validated statutory and management reports, with controlled definitions and drill-down to source transactions, including:

Core Financial

- Trial Balance
- Balance Sheet

- Profit & Loss
- Cash Flow
- General Ledger
- Partner/Vendor Ledger
- Aging reports (AR/AP)
- Budget vs Actual Reports

Compliance & Auditing Reports

- Tax (FBR) reporting support
- Withholding tax deduction reports
- Expenditure classification reports by budget head
- Grant / funding utilization reports (where applicable)
- Audit-ready transaction and approval reports

Inventory & Asset Report

- Inventory valuation reports
- Stock movement reports
- Asset register report
- Depreciation schedules
- Asset transfer and disposal reports
- Analytic Accounting Report

Budget & Project Report

- Budget allocation vs utilization
- Commitment reports (PR/PO based consumption)
- Civil works / development project expenditure tracking
- Institute-wise expenditure dashboards

Banking & Treasury

- Bank reconciliation reports
- Payment schedule tracking
- Liability aging
- Cash position summary

Reports must support:

- PDF format
- Excel export
- Pivot and graphical views
- Drill-down capability
- Role-based management dashboards

Custom Fields, Views & Report Flexibility

To ensure full alignment with KPTEVTA's operational, financial, and audit requirements, the system must support addition of organization-specific fields, layout adjustments, and reporting enhancements across all accounting and budgeting workflows (vendor bills, payments, bank transactions, assets, budgeting, tax reporting, and financial controls).

These configurations are subject to the approved solution design, implementation classification, scope baseline and change-control process.

The system must support:

- Addition of custom fields across accounting, budgeting, asset, and banking forms
- Configurable form views to include institute, budget head, funding source, project reference, and approval information
- Extendable list (tree) views with operational and analytical columns
- Customizable financial report formats and print layouts
- Enhanced pivot, graphical, and dashboard reporting with additional analytical fields
- Export of extended financial data in Excel/CSV formats

All customizations must be properly documented and included in user training materials.

Human Resources & Payroll Module

Process Overview

The Human Resource & Payroll module shall manage the complete employee lifecycle within KPTEVTA, from recruitment and appointment to retirement or final settlement, ensuring compliance with Government of Khyber Pakhtunkhwa regulations and KPTEVTA service rules while integrating workforce operations with Finance, Budget, Attendance, and Asset Management processes.

The system must support dynamic organizational requirements and allow configuration based on service rules, government policies, and administrative updates without structural limitations.

This module must ensure:

- Compliance with applicable government/KPTEVTA service rules and employment regulations
- Readiness for integration with relevant government reporting platforms (where applicable)
- Secure management of employee records and confidential data
- Payroll automation integrated with Accounting & Budget controls
- Workforce analytics, attendance monitoring, and manpower reporting
- Employee self-service functionality (leave application, payslip access, profile updates)
- Audit-ready documentation and full traceability of employee lifecycle actions

The HR system must integrate seamlessly with:

- Accounting, Finance & Budget Management
- Biometric Attendance System
- Asset Management (employee asset assignment and tracking)

Organizational Structure & Workforce Configuration

The system must allow structured configuration of:

- Company hierarchy including Head Office and Institutes
- Departments, sections, and functional units
- Job positions, designations, and reporting lines
- Cost centers/Analytic Account and payroll allocation structures

The system design must support expansion through addition of new institutes, departments, or administrative units without requiring structural redesign.

All organizational configurations must remain flexible to accommodate future changes in KPTEVTA's administrative structure and workforce management policies.

Recruitment & Onboarding Management

The system must support the complete recruitment cycle including:

- Vacancy creation and management
- Candidate application and tracking
- Interview scheduling and evaluation workflow
- Offer preparation and approval process

Onboarding Workflow

Onboarding must include configurable workflows covering:

- Employee registration and profile creation
- Appointment/contract documentation
- Internal approval processes
- Collection of required documents and compliance records
- Asset assignment (if applicable)
- System access and role assignment

The onboarding process must follow defined approval workflows and maintain a complete audit trail for all actions

and approvals.

Employee Master Data Management

The system must centrally manage all employee information required for administrative, operational, financial, and compliance purposes.

Employee records must support configurable fields to capture all organization-required information including personal details, employment history, job position, department, salary structure, and service records.

The system must allow secure storage of employee documents with support for document categorization, expiry tracking (where applicable), and controlled access to sensitive information.

All employee data must be maintained in a structured and auditable manner aligned with KPTEVTA's administrative policies and regulatory requirements.

Contract & Employment Management

The system must support employment contract and service record management in accordance with applicable KPTEVTA service rules and administrative policies, including:

- Employment contract / appointment management
- Contract amendments, extensions, and renewals
- Probation period tracking
- Contract expiry alerts and notifications
- Historical contract and appointment record tracking

All employment terms must be configurable to reflect organizational policies, service rules, and administrative updates.

Alerts and escalation rules must be configurable for contract expiry, probation completion, and renewal actions.

Attendance & Time Management

The system must support flexible attendance and working time management including:

- Multiple working schedules for administrative staff and institute personnel
- Office and institute-level attendance configurations
- Public holiday and leave calendars
- Overtime calculation rules (where applicable)
- Flexible working time policies based on organizational requirements

Attendance policies shall be configurable in accordance with KPTEVTA administrative policy and applicable service rules.

Biometric & Device Integration

The system must support integration with attendance devices such as:

- Fingerprint devices
- Face/AI recognition systems
- RFID systems

Capabilities must include:

- Automatic attendance synchronization
- ADMS Protocol Support
- Real-time attendance validation
- Overtime computation (where applicable)
- Exception handling workflows (missing punches, device failure, late arrivals)
- Correction request and approval process
- Dashboard for Biometric Devices which shows its online/offline status and offline/online history

Attendance data must integrate directly with payroll calculations and maintain a complete audit trail for attendance edits and approvals.

Leave Management

The system must support configurable leave policies including:

- Earned/annual leave
- Sick leave
- Casual or emergency leave
- Maternity leave
- Leave without pay
- Any additional organization-specific leave types as defined by service rules

Leave requests must follow configurable approval workflows based on organizational hierarchy. Leave balances must be automatically updated and integrated with payroll calculations where applicable.

Payroll Management

The payroll system must support structured salary processing in accordance with KPTEVTA service rules and administrative policies.

Payroll Capabilities Must Include:

- Configurable salary structures based on approved pay scales.
- Allowance and deduction management (e.g., allowances, taxes, recoveries, etc.)
- Overtime calculation where applicable
- Loan, advance, and installment deductions
- Contributory Provident Fund (CPF) calculation and deductions
- Gratuity / End of Service Benefits (EOSB) provisioning and settlement
- Payroll summaries and employee-wise salary records
- Institute-wise and department-wise payroll reporting
- Other payroll reports as required

Payroll workflow must include:

- Payroll processing shall include:
- Attendance validation and integration with biometric attendance records
- Leave adjustments affecting payroll calculations
- Payroll draft generation
- Review and approval workflow
- Payslip generation and employee access
- Automatic accounting posting of payroll entries
- Bank payment file generation for salary disbursement
- Support for batch payroll generation & Approval

The system must integrate payroll entries automatically into accounting.

Loans, Advances & Financial Requests

The system must support management of employee financial requests including:

- Salary advances
- Employee loans
- Installment-based repayment schedules

All requests must follow configurable approval workflows based on organizational authority levels. Approved advances and loans must automatically integrate with payroll for scheduled deductions and maintain a complete audit trail of approvals, disbursements, and repayments.

Gratuity/ End of Service Benefits (EOSB)

The system shall support calculation and management of gratuity or end-of-service benefits in accordance with applicable KPTEVTA service rules and administrative policies. The calculation shall:

- Consider total service duration of the employee

- Handle different separation cases such as retirement, resignation, or termination
- Calculate final settlement including gratuity and other dues
- Integrate automatically with payroll and accounting for financial postings

All gratuity calculation rules must remain configurable to accommodate updates in service regulations or organizational policies.

Offboarding & Final Settlement

The system must support structured employee offboarding and final settlement processes including:

- Resignation, retirement, or termination workflow
- Clearance approvals from relevant departments (HR, Finance, IT, Store/Assets, Admin)
- Asset return confirmation and closure of employee asset assignments
- Final payroll calculation including pending allowances/deductions
- Gratuity / end of service settlement (where applicable)
- Automatic accounting posting and financial integration
- Document archiving of separation letters, approvals, and settlement records

No employee separation closure must be allowed until all clearance approvals are completed and validated in the system.

Employee Self-Service (ESS) Portal

The system must provide secure employee portal access allowing:

- Leave applications and status tracking
- Advance and loan requests
- Attendance viewing and correction requests
- Payslip viewing and download
- Personal information update requests
- Document upload and management
- Employment/Service certificate requests

Managers must have controlled access to approve employee requests and view team-level information such as leave balances, attendance summaries, and request approvals. Portal access and permissions must be strictly controlled through role-based access rights to ensure data security and confidentiality.

Employee Record & Compliance Management

The system must maintain structured employee records and compliance documentation including:

- CNIC records
- Educational qualifications
- Service history, appointments, promotions and transfers
- Training and professional development records
- Medical and fitness records (where applicable)
- Disciplinary actions and service notes

The system must support document storage, expiry alerts (where applicable), and controlled access to sensitive employee records.

HR Analytics & Reporting

The system must provide configurable HR reports and management dashboards including:

- Headcount analysis by institute, department, and designation
- Payroll cost analysis and salary expenditure reporting
- Leave balance and leave liability reports
- Overtime analysis (where applicable)

- Employee turnover and separation analysis
- Workforce distribution reports (institute-wise, department-wise & overall)
- Contributory Provident Fund (CPF) reporting
- Gratuity / End of Service Benefits provisioning reports
- Branch/Institute wise and overall attendance report summary
- Branch/Institute wise and overall checkin/checkout report
- Branch/Institute wise and overall held vs vacant job position report

Reports must support multiple output formats including PDF and Excel and provide analytical views such as pivot tables, graphs, and management dashboards.

User Rights, Security & Audit Control

The system must enforce secure and controlled HR and payroll operations through:

- Role-based and organizational-unit-based access for HR, payroll and administrative users
- Segregation of duties to prevent unauthorized or conflicting actions
- Protection of sensitive payroll and employee data with restricted access
- Configurable approval hierarchies for HR actions and payroll processing
- Audit logs capturing all critical changes such as salary updates, contract modifications, and payroll adjustments
- Payroll period locking to prevent modifications after payroll finalization

System security must comply with enterprise-level standards to ensure confidentiality, integrity, and traceability of HR and payroll data.

Integration with Accounting & Other Modules

The HR system must integrate seamlessly with other ERP modules to ensure accurate data flow and operational coordination. The system must integrate with:

- Accounting & Finance for automatic payroll postings and financial reporting
- Attendance/Biometric System for employee attendance synchronization and payroll calculations
- Project Management for employee assignment to projects or development schemes (where applicable)
- Asset Management for tracking and management of assets assigned to employees

Integration must ensure real-time synchronization, controlled data exchange, and complete data integrity across all modules.

Customization & Scope Alignment

The HR & Payroll module must support organization-specific configurations including:

- Additional employee data fields and records
- Workflow customization for HR and payroll processes
- HR and payroll report enhancements
- Approval matrix configuration based on organizational hierarchy
- Employee Self-Service (ESS) portal adjustments

All required configurations defined by KPTEVTA as part of the approved project scope must be delivered within the agreed implementation framework and budget.

The system design must remain flexible and scalable to accommodate future enhancements aligned with organizational growth and administrative policy updates.

Student Lifecycle Management Module

Process Overview and Operating Boundary

The module shall manage the lifecycle of a trainee receiving instruction through a KPTEVTA institute, from application and admission through training delivery, progression, completion, placement and alumni follow-up. It shall maintain the complete operational history of each trainee across institutes, programmes, batches and status changes.

Internal attendance, assignments, practical observations and instructor judgements may be recorded to manage learning, progression and trainee support.

The module shall integrate with:

- HR and Payroll for instructor identity and availability.
- Accounting for fees, waivers, refunds and payment reconciliation.
- Biometric or approved attendance services.
- Documents for trainee evidence and externally issued documents.
- BI for governed progression, completion and employment indicators.
- National TVET and other approved external systems where an interface and data-sharing basis exist.

Explicitly Out of Scope

- Conducting, scheduling, invigilating or administering official examinations.
- Defining official examination papers, marking schemes, grades or pass rules, except where approved reference rules are needed for validation or display.
- Approving, declaring or changing an official examination result.
- Generating, numbering, signing, printing or issuing official marksheets, transcripts, degrees, diplomas or certificates.
- Presenting an internal assessment or training-completion record as an official qualification.

Training Programme, Curriculum and External Reference Setup

The system shall maintain version-controlled programme and curriculum records, including:

- Programme/trade name, level, duration, delivery pattern and institute authorization.
- Responsible external authority, affiliation or accreditation reference, and validity dates where applicable.
- Curriculum version, modules/subjects, planned contact hours, practical hours and prerequisite relationships.
- Annual, term or semester periods as defined by the programme, including any applicable credit-hour or external grading reference structure.
- Attendance, internal training-completion and referral criteria approved by KPTEVTA policy.
- Effective dates so that historic trainee records remain linked to the curriculum version actually delivered.

Online Admission and Eligibility Management

- Provide an online application portal with programme and institute selection, document upload, application tracking and applicant communication.
- Apply configurable eligibility rules for age, prior education, domicile, category, prerequisites and other approved criteria.
- Support merit calculation and seat allocation only according to approved KPTEVTA admission policy, with rule version, exceptions and approving authority retained.
- Prevent duplicate applications and trainee identities using approved identifiers such as CNIC/B-Form, contact details and defined duplicate-review rules.
- Issue an electronic admission or enrollment confirmation using an approved template.

- Record waitlist, rejected, withdrawn and deferred applications with reason codes and a complete decision history.

Trainee Profile, Identity and Data Consent

- Maintain a single trainee profile containing personal data, CNIC/B-Form, contacts, guardian details where applicable, prior education, photograph and admission documents.
- Record consent or other approved basis for sharing data with payment providers, authorized external authorities, NAVTTC, employers and government platforms.
- Separate sensitive identity and safeguarding data from general training access; apply field-level and document-level permissions.
- Preserve the history of corrected identity data and require approval for changes to critical identifiers after enrollment.
- Support an institute transfer without creating a second trainee identity, while retaining the full enrollment and movement history.

Enrollment, Batch, Capacity and Timetable Management

- Create sessions, batches, class groups and timetables linked to institute, programme, curriculum version, room/workshop and planned capacity.
- Enroll trainees in the approved batch and prevent capacity, prerequisite or date conflicts unless an authorized override is recorded.
- Maintain status history including admitted, enrolled, active, on hold, transferred, withdrawn, internally training-complete and closed.
- Assign planned modules and training activities without duplicating trainee records.
- Monitor room, workshop, equipment and instructor capacity where the required resource data is available.

Instructor Assignment and HR Integration

- Allow assignment only of instructors who have an active HR record and the required institute, trade or competency authorization.
- Detect timetable clashes and report instructor workload by programme, batch, institute and period.
- Retain assignment history, substitutions and approving authority.
- Control who may enter attendance, formative evidence, interventions and completion recommendations for a batch.

Digital Fees and Accounting Integration

- Generate fee demands/challans from approved fee schedules, waivers, scholarships and installment rules.
- Support approved payment channels such as bank counter, 1Link/1Bill, Raast QR, JazzCash or Easypaisa only where provider contracts and technical interfaces are available.
- Reconcile payments to the correct applicant or trainee and invoice; unmatched, duplicate and reversed transactions shall enter an exception queue.
- Maintain trainee and institute fee ledgers, outstanding balances, refunds, waivers and audit history.
- Do not block attendance or progression solely for a financial reason unless an approved KPTEVTA policy rule explicitly requires it.

Attendance and Participation

- Capture attendance by session, day or approved training activity through instructor entry, biometric integration or an authorized correction workflow.

- Calculate attendance percentages against the planned timetable and distinguish absence, approved leave, late arrival, device failure and missing data.
- Require a reason and approval for manual adjustments; preserve original device/event data where available.
- Generate alerts at configurable thresholds and include attendance in at-risk and progression review rules.
- Where attendance affects an external registration or eligibility process, display the policy outcome as an internal eligibility recommendation.

Training Delivery, Formative Assessment and Competency Evidence

The module shall support internal monitoring of learning and progression. It shall:

- Record delivery of planned modules, practical sessions, workshop hours, assignments and learning activities.
- Record formative checks, practical observations, competency evidence, instructor feedback and remedial actions using configurable internal rubrics.
- Distinguish internal formative status from externally received results in the database, screen labels, reports and portal.
- Allow attachments such as practical evidence, portfolios and supervisor observations subject to retention and privacy rules.
- Prevent internal users from publishing an internal score as an externally verified outcome.

Progression, At-Risk Monitoring and Interventions

Progression shall be a controlled training-management decision based on approved rules and evidence. The system shall:

- Evaluate configurable indicators such as attendance, planned activity completion, formative evidence, practical hours and unresolved holds.
- Classify trainees using approved internal statuses such as on track, support required, at risk, on hold or recommended to progress.
- Create intervention plans with reason, action, owner, due date, trainee contact record and review outcome.
- Record progression decisions, decision date, approving role, rationale and any override of the normal rule.
- Carry forward the history when a trainee changes batch, institute or curriculum version.
- Provide dropout-risk indicators only as decision support; no automated prediction may itself withdraw, fail or deny a trainee an opportunity.

Industry Placement, Apprenticeship and Workplace Learning

- Maintain industry partners, workplace-learning opportunities, agreements and approved supervisor contacts.
- Allocate trainees to internships or apprenticeships with dates, planned hours, location and responsible supervisors.
- Record attendance, supervisor feedback, incidents, practical evidence and completion of the placement component.
- Retain placement history and link it to the relevant programme and progression decision.
- Apply consent and access controls before sharing trainee information with an employer or workplace supervisor.

Internal Training Completion, Withdrawal, Transfer and Exit

- Determine internal training-completion status using approved attendance, activity, practical-hour and clearance rules.
- Record a completion recommendation or training-completion status using approved internal numbering and templates.

- Support withdrawal, suspension, transfer, re-entry and exit with standardized reason codes and approval history.
- Record outstanding fees, returned assets, safeguarding actions or other closure checks without deleting the training history.
- Make closed records read-only except through an authorized correction workflow.

External Registration and Outcome Recording

Where KPTEVTA exchanges registration or outcome information with an authorized external authority, the ERP may support the following controlled recordkeeping:

- Store the external authority, candidate/registration number, session, programme/trade reference and submission status.
- Prepare or export candidate and eligibility data in an approved format, with validation, approval and transmission audit logs.
- Store examination schedules, roll-number or admit-card references, and other documents only when received from an external source and clearly labelled with the issuer.
- Import or manually record an externally declared result or status with source, received date, verification method, verified-by user and supporting file/reference.
- Retain both the received value and any later correction, with reason and source; verified external outcomes shall be locked from ordinary editing.
- Store a reference copy of an externally issued document when permitted. The system shall not generate, alter or issue the source document.
- Display the issuer prominently wherever an external result or credential is shown, printed or made available in the portal.

Trainee Portal and Communications

- Allow trainees to view their profile, enrollment, timetable, attendance, fee status, internal training progress and intervention actions appropriate for disclosure.
- Allow secure upload of requested documents and submission of correction or support requests.
- An externally issued result or document may be displayed or downloaded only if it has been received, verified, approved for publication and clearly identifies the external issuer.
- Maintain communication history for admission, attendance alerts, fee notices, intervention meetings, placement and external outcome notifications.

Employment Outcomes and Alumni Follow-up

- Record consent-based employment status, employer, job role, sector, location, start date and relationship to training.
- Support tracer-study campaigns at configurable intervals and record response source and date.
- Report placement and employment outcomes by institute, programme, cohort and demographic dimensions permitted by policy.
- Distinguish verified employer information from trainee self-reporting.

Dashboards and Performance Indicators

- Applications, admissions, enrollment, active trainees and seat utilization.
- Attendance, internal progression, interventions, withdrawals and internal training completion.
- External registration status and externally reported outcomes, clearly labelled as external.
- Instructor workload, trainee-instructor ratios, room/workshop use and practical-hour delivery.

- Placement, apprenticeship, employment and tracer-study outcomes.
- Every KPI shall have a documented definition, numerator, denominator, data owner, refresh frequency and treatment of missing data.

Access, Privacy, Audit and Data Retention

- Apply institute, programme, role and field-level access so users see only the trainees and sensitive data required for their duties.
- Separate admission, training, finance, safeguarding, placement and external-outcome permissions.
- Record who created, changed, approved, imported, verified, published or corrected each critical trainee record.
- Restrict deletion of enrollment, attendance, progression and external-outcome records; corrections shall preserve history.
- Apply an approved retention schedule to identity documents, attendance, training evidence, external outcome documents and tracer data.
- Log all data exports and external transmissions containing personal trainee information.

National TVET and External-System Interoperability

- Use approved APIs or controlled file exchange with schema versioning, authentication, encryption, retry handling and reconciliation.
- Map programme/trade classifications to NAVTTC or other approved national/provincial standards without overwriting KPTEVTA source data.
- Share enrollment, completion, placement or employment data only within the approved purpose and data-sharing arrangement.
- Treat verification and official outcome data received from an authorized source as externally sourced, with issuer and verification status retained.
- Place failed or rejected messages in an exception queue and prevent silent data loss or duplicate submission.

Minimum Acceptance Scenarios

1. A trainee can move from application to enrollment with eligibility, seat, fee and identity checks recorded and auditable.
2. Attendance and internal formative evidence update progression indicators without creating an externally verified result.
3. An at-risk trainee receives an intervention plan, review and progression decision with a complete history.
4. Internal training completion can be recorded using approved internal status and document templates.
5. An externally declared result can be imported, verified, corrected through a controlled workflow and shown with the external issuer identified.
6. A user without external-outcome rights cannot enter, change, verify or publish externally sourced information.
7. Institute transfer preserves one trainee identity and the complete training history.
8. Portal users can view and download only the training records and externally supplied documents permitted by their access rights.

Fleet Management Module

Process Overview

The Fleet Management module shall manage KPTEVTA's vehicles end-to-end, including registration, assignment to drivers/offices, movement and utilization tracking, fuel consumption, maintenance/repairs, compliance documents, and full operational cost visibility across Head Office and institutes.

The module must integrate with HR (drivers), Accounting (cost posting), Procurement/Inventory (spare parts & services), and Projects (civil works vehicles usage allocation), ensuring audit-ready fleet operations and controlled approvals.

Fleet Structure, Locations & Ownership

The system must support multi-location fleet operations (Head Office & Institutes) with vehicle ownership/assignment per unit. The system must support fleet grouping by:

- Head Office / institute
- Vehicle type (car, coaster, bus, pickup, motorcycle, etc.)
- Usage type (official, inspection/monitoring, project/civil works, student transport where applicable)

Vehicle Master Data & Registration

The system must maintain a complete vehicle master record including:

- Registration number, chassis/engine number
- Make/model/year, vehicle category/type
- Fuel type, seating/capacity (where relevant)
- Purchase/acquisition info, vendor, warranty
- Current assigned location/unit and driver
- Status (active, under maintenance, standby, disposed)

Document management must support uploading and tracking expiry of:

- Registration, fitness certificate, insurance, token tax
- Permit/route documents (if applicable)
- Any KPTEVTA-specific compliance documents

Driver Management & HR Integration

Drivers must be enrolled in the HR system first, and only HR-approved employees can be assigned as vehicle drivers.

The system must support

- Primary and secondary driver assignment
- Driver assignment history with dates and approving authority
- Driver-wise vehicle usage reporting

Role-based access must ensure only authorized users can assign/replace drivers.

Trip Movement & Utilization Tracking

The system must support trip/usage logging including:

- Trip date/time, origin/destination, purpose, requesting unit
- Driver, passengers/office (optional), project reference (if applicable)
- Start/end odometer and calculated distance

The system must support institute-wise and vehicle-wise utilization reporting:

- Total distance per period
- Vehicle availability/downtime (maintenance days)
- Usage by project/cost center (where applicable)

Odometer Management

The system must support odometer tracking with dated entries per vehicle to maintain accurate mileage history.

Odometer readings must be captured from:

- Trip logs
- Fuel transactions
- Maintenance/service records

The Odometer anomaly controls must flag:

- Decreasing readings
- Unusually high/low distance vs fuel usage patterns

Fuel Management & Control

The system must support fuel logging per vehicle including:

- Date, station/vendor, quantity, cost, odometer reading
- Fuel type and payment method (cash, card, invoice)

Fuel controls must support government-style restrictions such as:

- Vehicle-linked fuel card controls, PIN/user logging, required odometer entry, transaction limits (per day/per fill), and exception flags.

The system must provide fuel analytics:

- Fuel consumption (km/l)
- Idling/inefficiency flags (if telematics available)
- Fuel variance and suspected misuse alerts

Preventive Maintenance, Repairs & Service Management

The system must support planned preventive maintenance schedules to reduce downtime and extend vehicle life.

Maintenance must support:

- Service types (oil change, filters, tyres, brakes, etc.)
- Service intervals by time and/or mileage
- Work orders / service requests
- Vendor workshops and internal maintenance (if applicable)

Repair records must capture:

- Fault description, service performed, parts used, labor cost, vendor bill reference
- Vehicle downtime period and return-to-service date

Maintenance history and total cost per vehicle must be available for decision-making.

Spare Parts & Inventory Linkage

The system must support linking maintenance actions to spare parts consumption where inventory is managed in Odoo.

Parts issued for fleet maintenance must record:

- Part name/serial (if applicable), quantity, store location, vehicle reference

Controls must prevent unauthorized issue of spare parts without approved maintenance request.

Costing, Budget Allocation & Accounting Integration

All fleet costs must integrate with Accounting including:

- Fuel costs
- Maintenance/repairs
- Insurance, taxes, permits
- Driver allowances (if applicable and approved)

The system must support allocating fleet expenses by:

- Head Office/ Institute / cost center
- Project / civil works scheme (where applicable)
- Vehicle type/category

The system must provide vehicle-wise total cost of ownership reporting (cost tracking across time/vehicle is a core requirement).

Accidents, Claim & Incident Register

The system must support incident reporting including:

- Date, time, and location of the incident
- Driver and vehicle involved
- Description of the incident
- Upload of photos and supporting documents
- Police report reference (where applicable)
- Insurance claim registration and settlement status

The system must maintain linkage between incident records and:

- Maintenance or repair records carried out by third-party workshops
- Insurance documents and claim correspondence
- Accounting records for repair expenses, insurance recoveries, or claim settlements

All accident and incident records must maintain a complete audit trail and remain accessible for administrative review and reporting.

Approval, Access Rights & Audit Control

Role-based permissions must be enforced for:

- Vehicle creation/updates
- Driver assignment
- Fuel approvals (if required)
- Maintenance approvals and vendor selection
- Disposal approvals

Approval workflows must be enforceable for:

- High-value repairs
- New tyre/battery purchases
- Exceptional fuel consumption
- Vehicle transfers between institutes

Audit trails must record who/when/what for critical changes and overrides.

Compliance & Alert Notification

The system must generate configurable alerts for:

- Registration/fitness/insurance expiry
- Scheduled maintenance due (time or mileage based)
- Abnormal fuel consumption or odometer anomalies
- Pending approvals and blocked actions

Alerts must be visible in dashboards and logged.

Reports & Dashboards

The system must provide dashboards and reports including:

- Fleet inventory (vehicles by institute/status/type)
- Utilization (distance/time, availability/downtime)
- Fuel consumption and cost analytics
- Maintenance cost and frequency (vehicle-wise/vendor-wise)
- Compliance expiry tracker
- Project/cost-center wise fleet cost allocation

Reports must support PDF/Excel export and pivot/graph views.

Custom Fields, View & Report Flexibility

The Fleet module must support organization-specific:

- Additional vehicle fields (region/institute tags, asset tag, project allocation)
- Custom workflows/approvals
- Customized print formats (vehicle log, trip sheet, maintenance sheet)
- Enhanced dashboards and analytics fields

All such configurations are part of agreed implementation scope and must remain scalable without structural limitations.

Delivery Expectation

Fleet Management module must be implemented with controlled, paperless, and auditable fleet operations aligned with KPTEVTA's governance and operational policies. The implementation must ensure:

- Digital vehicle logs replacing manual trip registers
- Automated maintenance scheduling to reduce vehicle downtime
- Controlled fuel consumption tracking and monitoring
- Complete lifecycle tracking of vehicles including acquisition, operation, maintenance, and disposal
- Integration of fleet costs into the ERP financial system for accurate operational cost reporting
- Centralized fleet visibility across all KPTEVTA institutes and offices

The implementation partner must provide:

- Fleet configuration documentation
- Vehicle master data migration (if existing data is available)
- User training for fleet administrators and drivers
- Operational manuals for vehicle logging, fuel recording, and maintenance workflows
- System testing and validation reports
- Support and handover documentation

Integration Requirements

The Fleet Management module must integrate with other ERP modules to ensure accurate operational and financial data flow.

HR Integration

The system must integrate with the HR module to support:

- Driver registration and employee assignment
- Driver eligibility verification
- Driver history and performance tracking

Only HR-registered employees must be allowed to operate or be assigned as vehicle drivers.

Accounting Integration

Fleet expenses must integrate directly with the Accounting module including:

- Fuel purchases
- Maintenance and repair costs
- Insurance and tax payments
- Vehicle acquisition and disposal transactions

All fleet-related expenses must be recorded in appropriate accounting journals and linked to cost centers.

Analytics & BI Integration

Fleet data must integrate with Business Intelligence dashboards to support:

- Fleet utilization analytics
- Cost analysis per vehicle
- Maintenance performance reporting
- Fuel consumption trends

Analytics must enable management to make data-driven decisions about fleet operations and asset replacement planning.

Project Management - Civil Works & Development Projects

Process Overview

The Project Management module shall manage the planning, execution, monitoring, and reporting of civil works and development projects undertaken by KPTEVTA. The module must support projects such as:

- Construction of new institutes
- Renovation and rehabilitation of training facilities
- Infrastructure development projects
- Equipment installation projects
- Government-funded development schemes

The system must ensure that projects are executed within approved scope, time, and budget, which is a fundamental objective of government project management frameworks. The module must integrate with:

- Accounting & Budgeting
- Procurement / Purchase Management
- Inventory Management
- HR & Resource Planning
- Fleet Management
- BI Analytics dashboards

Project Initiation & Planning

The system must support structured project initiation processes including:

- Project proposal creation
- Project scope definition
- Project objectives and deliverables
- Approval workflow for project initiation

Project planning must include:

- Project timeline planning
- Budget allocation
- Resource allocation
- Identification of project risks

The system must support creation of Project Work Breakdown Structure (WBS) to divide projects into manageable components.

Project Structure & Work Breakdown

Projects must be organized into structured components including:

- Project phases
- Milestones
- Tasks and sub-tasks

The system shall decompose projects into governed tasks and stages and support:

- Task creation and assignment
- Task dependencies
- Task priorities
- Task deadlines

Milestone & Phase Management

The system must support milestone-based project tracking. Milestones represent key project events such as:

- Project approval
- Tender award

- Construction start
- Completion of civil works
- Equipment installation
- Project completion

Milestones help track progress and ensure projects stay aligned with timelines.

Project Scheduling and Time Management

- Maintain an approved baseline schedule and controlled revisions.
- Record task dependencies, planned and actual dates, critical delays and responsible owners.
- Compare baseline, current forecast and actual progress.
- Require approval and reason for material schedule changes or extensions of time.
- Generate overdue-task, delayed-milestone and forecast-completion alerts.

Resource Planning & Assignment

The system must support allocation of resources including:

- Project managers/Director/Deputy Director
- Sub Engineers and technical staff
- Field inspectors
- Administrative staff

The system must allow assignment of HR-registered employees to project activities. Resource planning must support:

- Workload balancing
- Task allocation
- Project staff utilization monitoring

Contractor & Vendor Management

Civil-works projects involve external contractors. The system shall support:

- Contractor registration and vendor database
- Contractor assignment to projects
- Contract document storage
- Contract value tracking

Contract performance shall be linked to approved scope, milestones and deliverables.

- Interim payment certificates or equivalent progress claims shall be recorded with measurement evidence and approval status.
- Variations, extensions of time, retention and liquidated-damages decisions shall follow approved workflows where applicable.
- Contractor performance, disputes and corrective actions shall be available for procurement and project review.

The system must integrate with the Procurement module for contractor selection and contract award.

Project Budgeting & Cost Control

The system must support project financial management including:

- Project budget definition
- Budget allocation by activity
- Budget approval workflows

Project expenses must be tracked including:

- Construction costs

- Material procurement
- Contractor payments
- Equipment installation costs

All project financial transactions must integrate with the Accounting module.

Project Progress Monitoring

The system must support continuous monitoring of project implementation. Monitoring capabilities must include:

- Physical progress tracking
- Financial progress tracking
- Project status updates

Authorized project roles, including the Director, Deputy Director and Sub-Engineer, shall be able to:

- Update project progress
- Record site inspections
- Upload progress reports and images

Project Documentation Management

The system must support storage and management of project documents including:

- Project proposals
- Design drawings
- Contractor agreements
- Inspection reports
- Completion certificates

Documents must be accessible through the ERP document management system.

Project Issue & Risk Management

The system must support risk and issue management including:

- Risk identification
- Issue reporting
- Risk mitigation planning

Authorized project roles shall record and manage risks or issues including:

- Construction delays
- Contractor disputes
- Budget overruns
- Resource shortages

Field Inspection & Monitoring

The system must support monitoring of civil works through field inspections including:

- Site inspection scheduling
- Inspection reports
- Photo and document uploads
- Inspection observations and recommendations

Inspection reports must be linked to the respective project and milestone.

Project Performance & Monitoring

The system must provide project performance indicators including:

- Project completion percentage
- Budget utilization rate
- Schedule variance

- Cost variances

These indicators will help management evaluate project performance.

Reporting & Analytics

The system must provide reports including:

- Project status reports
- Budget vs actual expenditure reports
- Contractor performance reports
- Project completion reports

Reports must support:

- Drill-Down Capability
- PDF export
- Excel export
- Dashboard visualization

Project Dashboards

The system must provide dashboards for management including:

- Active projects overview
- Project completion progress
- Budget utilization analysis
- Delayed project alerts

Dashboards must support drill-down analytics.

Integration Requirements

The Project Management module must integrate with other ERP modules including:

Accounting Integration

- Project budgets and expenditures
- Contractor payment processing
- Cost center allocation

Diary, Dispatch & File Management System

Process Overview

The Diary Dispatch & File Management System shall provide a centralized digital platform for managing official correspondence, file movement, and document workflows across KPTEVTA.

The system must replace manual registers and paper-based file movement with a fully digital diary and dispatch system, allowing efficient tracking of inward and outward correspondence. The system must support:

- Inward correspondence registration (incoming letters)
- Outward correspondence dispatch tracking
- Digital file creation and file movement workflows
- Document storage and retrieval
- Electronic approval and file noting processes

The module must integrate with:

- Document Management System
- HR module (user roles and departments)
- Project Management (project-related correspondence)
- Accounting (financial approvals where applicable)

Inward Correspondence Management

The system must support registration and tracking of incoming correspondence. Capabilities must include:

- Diary entry creation for incoming letters
- Unique inward diary number generation
- Recording sender information (organization/person)
- Subject and reference number recording
- Document upload and scanning

The system must record:

- Date of receipt
- Receiving office/section
- Responsible officer

All inward correspondence must be searchable and trackable.

Outward Correspondence & Dispatch Management

The system must support management of outgoing letters and official communications. Capabilities must include:

- Outward dispatch number generation
- Recipient information recording
- Subject and reference number recording
- Attachment of outgoing documents

The system must record dispatch details including:

- Dispatch date
- Dispatch method (hand delivery, courier, email)
- Responsible office

Dispatch records must maintain a complete history for audit and reference purposes.

Electronic File Creation & Management

The system must support electronic file management including:

- Creation of digital files for official matters
- File classification by department, subject, or project
- Assignment of file reference numbers

- Linking correspondence to specific files

Each file must support:

- Multiple documents and attachments
- File notes and comments
- Version history of documents

The system must ensure organized storage and easy retrieval of files.

Digital File Movement Workflow

The system must support electronic movement of files between offices and officers. Capabilities must include:

- File routing between departments/Sections/Field institutes
- Assignment of files to specific officers
- Tracking of file status and location
- Recording of file movement history

Management must be able to monitor the current position of any file within the system.

File Noting & Approval Workflow

The system must support digital file noting and approval processes. Capabilities must include:

- Recording officer notes and comments
- Document annotation and remarks
- Approval and review workflows

Approval workflows must support hierarchical approval processes including:

- Section officer review
- Department/Section head approval
- Senior management approval (where required)

Document Storage & Retrieval

The system must provide a centralized digital repository for documents. Capabilities must include:

- Document upload and storage
- Folder-based document organization
- Metadata tagging and classification
- Advanced search functionality

Users must be able to retrieve documents using:

- File number
- Subject
- Sender/recipient
- Date range

Alerts & Notifications

The system must provide alerts for important workflow events including:

- Pending file approvals
- Delayed file processing
- Unattended correspondence
- Upcoming response deadlines

Notifications must be visible on user dashboards and through system alerts. The system must also support automatic email notifications to relevant users for important events such as:

- File assignment or movement
- Approval requests

- Pending actions and reminders
- Escalations for delayed correspondence

Email notification settings must be configurable based on user roles and workflow requirements.

Document & Version Control

The system must support document version management including:

- Version history tracking
- Controlled document updates
- Access to previous document versions

The system must prevent unauthorized document modifications.

Reports & Dashboards

The system must support reports including:

- Inward diary reports
- Outward dispatch reports
- File movement tracking reports
- Pending file reports

Reports must support:

- PDF export
- Excel export
- Dashboard analytics
- Drill-down Capability

User Role & Access Control

The system must enforce role-based access control aligned with KPTEVTA's organizational structure. User roles must include:

- Diary/Dispatch Operator - Responsible for registering inward correspondence, generating outward dispatch entries, and maintaining diary records.
- Section Officer / Section User (Head Office) - Responsible for reviewing correspondence, processing files, adding notes, and forwarding files within Head Office sections.
- Department Head / Director (Head Office) - Responsible for reviewing files, providing approvals, issuing decisions, and monitoring section-level correspondence.
- Managing Director (Senior Management) - Responsible for reviewing high-priority files, approving major decisions, issuing policy directives, and monitoring organizational correspondence and workflow performance through executive dashboards.
- Institute User (Field Institutes) - Responsible for receiving correspondence from Head Office, submitting institute-related communications, and processing institute-level files.
- Manager Employment Exchange Office - Responsible for managing correspondence and files related to employment exchange activities with the Head Office
- System Administrator - Responsible for user management, role configuration, workflow configuration, and system administration.

Access permissions must be restricted based on:

- User role
- Organizational unit (Head Office section, institute, or employment exchange office)
- Assigned responsibilities within the workflow

The system must ensure that users can only access files, correspondence, and documents relevant to their assigned

role and department while maintaining complete audit traceability.

Security & Audit Controls

The system must maintain a complete audit trail for:

- Document creation and modifications
- File movement between users
- Approval actions

The system must ensure secure storage of official documents and correspondence.

Integration Requirements

The Diary Dispatch & File Management System must integrate with other ERP modules including:

HR Integration

- User authentication
- Department and role assignment

Project Management Integration

- Linking project-related correspondence to project files

Accounting Integration

- Linking financial approvals and documents to accounting workflows

Customization & Future Scalability

The system must support customization including:

- Additional file metadata fields
- Workflow modifications
- Custom reports and dashboards

The system must remain scalable to support increasing volumes of correspondence and documents across all KPTEVTA offices.

Digital Signature & Electronic Approval

The system must support secure digital signatures for electronic document approvals. Capabilities must include:

- Digital signing of official documents
- Multi-level electronic approval workflows
- Verification of digitally signed documents
- Recording of signing authority and timestamp

Digital signatures must ensure authenticity, integrity, and non-repudiation of official records.

Barcode/QR Code File Tracking

The system must support barcode or QR-code-based tracking of physical and electronic files. Capabilities must include:

- Automatic generation of barcode or QR code for each file
- Printing of barcode or QR code labels for physical file covers
- Scanning of barcode/QR code to retrieve file information
- Tracking file movement across departments/sections/institutes.

The system must record:

- File movement history
- Current file holder
- Time spent at each processing stage.

Barcode or QR-code-based scanning must allow quick retrieval of file records within the system.

Document Management System

Process Overview

The Document Management System (DMS) shall provide a centralized platform for storing, organizing, managing, and retrieving digital documents across KPTEVTA Head Office, Field Institutes, and Employment Exchange Offices. The system must replace scattered document storage practices with a structured digital repository that supports document workflows, approvals, version control, and long-term archival. The system must support:

- Centralized document storage and classification
- Department/section-wise document management at Head Office
- Institute-wise document management for field institutes
- Employment Exchange Office document management
- Secure document access and sharing
- Document approval workflows
- Version control and document history
- Digital archiving and retrieval

The module must integrate with:

- Diary Dispatch & File Management System
- HR & Payroll module
- Accounting & Finance module
- Project Management module
- Trainee Lifecycle Management module

Organizational Document Structure

The system must support document organization based on KPTEVTA's operational structure including:

- Head Office departments and sections
- Field Institutes
- Employment Exchange Offices

Each organizational unit must be able to maintain its own document repository while remaining part of the centralized ERP environment. The system must support:

- Department-wise folders and repositories for Head Office
- Institute-wise document repositories for field institutes
- Employment Exchange Office repositories for office-specific records
- Controlled document sharing between organizational units where authorized

Document Repository & Storage

The system must provide a centralized document repository for storing all organizational records. Capabilities must include:

- Folder-based document organization
- Department-wise document storage
- Institute-wise document storage
- Employment Exchange Office document storage
- Document categorization using tags or metadata
- Secure document upload and downloads

The repository must allow structured storage for documents such as:

- Administrative files
- Financial records
- Project documents

- HR records

Document Classification & Metadata

The system must support classification of documents using metadata fields. Metadata may include:

- Document title
- Department / Section
- Institute / Field Office
- Employment Exchange Office
- Document category
- Creation date
- Author or responsible officer
- Related project, employee, or student (where applicable)

This classification must enable quick search and retrieval of documents.

Document Uploading & Scanning

The system must support uploading and digitization of documents. Capabilities must include:

- Uploading documents in common formats (PDF, DOCX, XLSX, images)
- Scanning of paper documents for digital storage
- Drag-and-drop document uploads
- Linking uploaded documents to relevant records within ERP modules

Document Version Control

The system must maintain version history for documents. Capabilities must include:

- Tracking of document revisions
- Access to previous document versions
- Identification of document author and modification date
- Prevention of unauthorized document overwriting

This ensures that document updates remain fully traceable.

Document Approval Workflow

The system must support electronic document approval workflows. Capabilities must include:

- Routing documents for approval
- Multi-level approval workflows
- Recording approval decisions and comments

Approval workflows must support hierarchical approvals such as:

- Section review
- Department head approval
- Institute-level approval (where applicable)
- Employment Exchange Office approval (where applicable)
- Senior management approval (where required)

Document Search & Retrieval

The system must provide advanced document search functionality. Users must be able to search documents using:

- Document name
- File number or reference number
- Keywords or tags
- Department / Section
- Institute / Field Office

- Employment Exchange Office
- Date range

Search results must allow quick retrieval of relevant documents.

Document Access Control

The system must enforce secure document access controls. Capabilities must include:

- Role-based document access permissions
- Department-level and institute-level document visibility
- Restricted access for confidential documents

Only authorized users must be allowed to view, edit, or approve documents.

Document Sharing & Collaboration

The system must allow controlled document sharing and collaboration. Capabilities must include:

- Sharing documents between Head Office departments
- Sharing documents between Head Office and field institutes
- Sharing documents with Employment Exchange Offices where authorized
- Adding comments or notes on documents
- Tracking document activity and user actions

Collaboration must maintain document integrity and access control.

Document Retention & Archival Management

The system must support long-term storage and archival of documents. Capabilities must include:

- Document retention policies
- Archiving of inactive or historical documents
- Secure storage of archived documents

Archived documents must remain searchable and retrievable when required.

Alerts & Notifications

The system must provide alerts for important document events including:

- Pending document approvals
- Document review reminders
- Expiry of important documents

Notifications must be visible through system dashboards and configurable email alerts.

Reports & Dashboards

The system must support reporting and analytics for document management including:

- Department-wise document statistics
- Institute-wise document statistics
- Employment Exchange Office document statistics
- Document approval status reports
- Document activity logs

Reports must support:

- PDF export
- Excel export
- Dashboard visualization
- Drill-Down Capability

Security & Audit Controls

The system must maintain full auditability of document activities. Capabilities must include:

- Tracking document uploads and edits

- Recording approval actions
- Monitoring document access history

Audit logs must capture:

- User performing the action
- Date and time of action
- Description of the activity

Integration Requirements

The Document Management System must integrate with other ERP modules including:

Diary Dispatch & File Management

- Linking documents with inward and outward correspondence

HR & Payroll

- Storage of employee records and HR documents

Accounting & Finance

- Storage of financial records and approvals

Project Management

- Storage of project plans, drawings, and reports

Trainee Lifecycle Management

- Storage of trainee documents, training records and verified reference copies of externally issued documents

Customization & Future Scalability

The system must support future expansion including:

- Additional metadata fields
- Custom document workflows
- Additional departments, institutes, and offices
- Integration with external document repositories

The system must remain scalable to support increasing volumes of documents across Head Office, Field Institutes, and Employment Exchange Offices.

Business Intelligence & Analytics Dashboards & Reference Documentation

Process Overview

The Business Intelligence (BI) & Analytics module shall provide centralized dashboards, analytical reporting, and data visualization to support strategic decision-making across KPTEVTA. The module must collect and analyze data from all ERP modules and present it through interactive dashboards, reports, and performance indicators. The system must support:

- Real-time management dashboards
- Institutional performance indicators
- Analytical reporting and trend analysis
- Data visualization for decision support
- Reference documentation for operational workflows and reporting standards

Dashboard and report definitions shall identify the source fields, calculation logic, refresh frequency and data owner.

Data Source & Integration

The BI system must collect data from all ERP modules including:

- Trainee Lifecycle Management
- HR & Payroll
- Accounting & Budgeting
- Procurement & Inventory
- Fleet Management
- Project Management
- Document Management

Data from these modules must be aggregated into analytical datasets for reporting and dashboards.

Dashboard Framework

The system must support creation of interactive dashboards displaying key performance indicators. Dashboards must provide:

- Graphical charts and visual indicators
- Summary metrics
- Drill-down capability to view detailed data
- Filters for date ranges, institutes, departments, and programs

Executive Management Dashboards

The system must provide high-level dashboards for senior management including:

- Overall institutional performance
- Student enrollment statistics
- Budget utilization
- Project progress
- Institute performance indicators

Executive dashboards must provide a consolidated view of KPTEVTA operations across all institutes.

Operational Dashboards

The system must provide operational dashboards for department managers including:

Training Operations Dashboard

- Student enrollment by institute and program
- Attendance statistics
- Trainee progression and externally reported outcomes

- Internal training-completion rates and verified external outcomes

HR Dashboard

- Employee distribution by Head Office, Institutes & EE
- Attendance and leave statistics
- Payroll expenditure

Finance Dashboard

- Budget vs actual expenditure analysis (department, institute, EE and project-wise)
- Government grant and fund utilization tracking
- Expenditure analysis by category (HR, operations, projects, procurement, etc.)
- Outstanding payments and financial liabilities
- Budget variance monitoring and alerts

Project Dashboard

- Project progress
- Budget utilization
- Project completion status

Fleet Dashboard

- Vehicle utilization
- Fuel consumption
- Maintenance costs

Analytical Reporting

The system must support advanced analytical reporting including:

- Trend analysis
- Performance comparison between institutes
- Program performance analysis
- Financial performance reports

Analytical reports must allow users to identify patterns and operational trends.

Pivot Table & Data Analysis

The system must support dynamic data analysis through pivot tables and spreadsheets. Capabilities must include:

- Aggregation of data across modules
- Interactive pivot reports
- Data filtering and groupings

Pivot views allow users to aggregate and analyze records for reporting and trend identification.

Visualization & Charts

The system must support graphical data visualization including:

- Bar charts
- Line charts
- Pie charts
- Performance indicators

Charts must update automatically based on real-time ERP data.

KPI Monitoring

The system must support monitoring of key performance indicators (KPIs). KPIs may include:

- Student enrollment targets
- Training completion rates
- Budget utilization
- Project completion timelines
- Student-teacher ratios

Each KPI shall have an approved definition, calculation, owner and treatment of missing or late data.

Alerts & Performance Indicators

The system must generate alerts for critical performance indicators including:

- Budget overruns
- Project delays
- Low attendance rates
- Operational performance issues

Alerts must be visible in dashboards and configurable for email notifications.

Reference Documentation & Standardized Workflows

The system must maintain reference documentation for operational workflows including:

- Standard operating procedures (SOPs)
- Reporting standards
- Dashboard definitions
- KPI calculation methodologies

This documentation will ensure consistent reporting across KPTEVTA departments and institutes.

Report Export & Data Sharing

The system must allow exporting reports in multiple formats including:

- PDF
- Excel
- CSV

Reports must support sharing with authorized users.

User Role & Access Control

The BI system must support role-based access including:

- Executive management
- Department heads
- Institute management
- Analysts and reporting staff

Users must only access dashboards and reports relevant to their roles.

Security & Data Governance

The system must enforce secure handling of analytical data including:

- Role-based data access
- Data validation and accuracy checks
- Audit logs for report modifications

Sensitive information must be protected from unauthorized access.

Customization & Future Scalability

The system must support:

- Creation of new dashboards
- Addition of new KPIs
- Integration with external BI tools

The system must remain scalable to support future analytical needs.

Integration with ERP Modules

The system must support:

- Trainee Lifecycle Management
- HR & Payroll
- Accounting & Finance
- Fleet Management
- Project Management
- Document Management

Integration must ensure dashboards reflect real-time operational data.

ERP Upgrade & Data migration

Process Overview

The ERP migration workstream shall move approved data and redesigned processes from Flectra 1.6 (an Odoo fork) to the approved Odoo 19 target baseline while preserving integrity, continuity and audit evidence.

The work shall be managed as a controlled reimplementing and migration. Master data, transactions, configuration and custom code shall be assessed separately; data not migrated shall be retained in an approved archive with defined access.

The upgrade process must include:

- Migration of ERP modules currently in use
- Migration of historical transactional data
- Migration of system configurations and master data
- Validation and reconciliation of migrated records

The upgraded system must remain compatible with the new modules being implemented within the ERP platform.

Existing System Overview

KPTEVTA currently operates Flectra 1.6 ERP, which manages several administrative and financial processes. The following modules and functionalities are currently operational:

Human Resource Management (HRM)

The HR module manages employee information and workforce records including:

- Employee profiles and personal information
- Employment contracts
- Leave management
- Attendance management

Attendance data is retrieved through biometric devices, including:

- AI facial recognition machines
- Standard facial biometric devices

These devices are installed at Head Office and Field Institutes, and attendance records are automatically retrieved into the ERP system as draft entries and later confirmed.

Payroll Management

The payroll module currently supports:

- Salary structures
- Salary rules
- Salary rule categories
- Payslip generation
- Batch Generation
- Various Dynamic Drill down reports

Payroll calculations are based on configured salary rules and attendance records.

Budget Management

The system currently manages budget allocations and releases including:

- Budget allocation
- Budget releases
- Budget surrender

Budgets are maintained for:

- Head Office
- Field Institutes

- Employment Exchange Offices

Each organizational unit is represented as an Analytic Account within the ERP system. Budget allocations are managed through these analytic accounts.

Accounting

The accounting module currently supports:

- Vendor bill processing
- Journal entries
- Expense recording

Financial transactions are linked to analytic accounts to allow budget tracking across different organizational units.

Upgrade Objectives

The ERP upgrade must achieve the following objectives:

- Migration and controlled reimplementation from Flectra 1.6 to the approved Odoo 19 target baseline
- Preservation of historical financial and HR records
- Migration of configurations including salary rules, budgets, and analytic accounts
- Integration of upgraded modules with newly introduced ERP modules
- Improvement of system performance and scalability

Data migration Scope

The migration must include the following categories of data:

Master Data

The following master records must be migrated:

- Employee records
- Vendor records
- Institutes and organizational units
- Chart of accounts
- Analytic accounts
- Salary structures and salary rules

Transactional Data

Historical transactions must also be migrated including:

- Payroll records and payslips
- Leave records
- Attendance records
- Vendor bills
- Journal entries
- Budget allocations, releases, and surrender records

Configuration Data

The migration must include system configurations including:

- Payroll configuration (salary rules, categories, structures)
- Budget configuration and analytic account setup
- Accounting configurations
- Attendance integration configurations

Budgets are maintained for:

- Head Office

- Field Institutes
- Employment Exchange Offices

Each organizational unit is represented as an Analytic Account within the ERP system. Budget allocations are managed through these analytic accounts.

Biometric Attendance Integration Migration

The upgraded system must continue to support biometric attendance integration. Capabilities must include:

- Automatic retrieval of attendance records from biometric devices
- Integration with AI facial recognition machines
- Integration with standard facial biometric devices
- Creation of draft attendance entries in ERP
- Automatic attendance confirmation based on configured rules

The upgraded ERP must remain compatible with existing biometric devices deployed at:

- Head Office
- Field Institutes

Budget & Analytic Accounting Migration

The system must migrate the existing analytic account structure used for budget management. Capabilities must include:

- Migration of analytic accounts representing:
 - Head Office
 - Field Institutes
 - Employment Exchange Offices
 - Various Projects
- Migration of budget allocations and releases
- Migration of budget surrender records

The upgraded ERP must ensure continuity of budget monitoring through analytic accounts.

Data validation & Reconciliation

After migration, the system must perform data validation to ensure data integrity. Validation must include:

- Employee data verification
- Payroll reconciliation
- Financial data reconciliation
- Budget balance verification
- Attendance Data

Financial totals must match between the old ERP and the upgraded system.

Testing & User Acceptance

The upgrade process must include testing phases including:

- System testing
- Data validation testing
- User acceptance testing (UAT)

Users must verify that all migrated data and processes function correctly in the upgraded system.

User Training & Documentation

The implementation partner must provide training to system users including:

- HR users
- Finance users

- Administrative users

Training must include:

- New system features in Odoo 19
- Updated workflows
- Reporting and dashboards

User manuals and documentation must be provided.

Go Live & Cutover Strategy

The upgrade process must follow a structured cutover strategy including:

- Final data migration
- System verification
- Production deployment

The transition from Flectra to Odoo 19 must ensure minimal disruption to operational processes.

Post Migration Support

The implementation partner must provide post-migration support including:

- Issue resolution
- System optimization
- Data correction (if required)

Support must continue until the system stabilizes after deployment.

Data migration Methodology

The ERP upgrade process must follow a structured data migration methodology to ensure accuracy, completeness, and integrity of all migrated records.

The migration process must follow standard Extract-Transform-Load (ETL) principles.

Data Extraction

The implementation partner must extract required data from the existing Flectra 1.6 database. Data extraction must include:

- Master data
- Transactional records
- Configuration settings

Data must be extracted in structured formats suitable for migration.

Data Mapping

All existing data fields must be mapped between Flectra 1.6 and Odoo Version 19.

- Employee records
- Payroll structures and salary rules
- Analytic accounts
- Budget records
- Accounting records

Mapping documentation must clearly define:

- Source fields
- Target fields
- Data transformation rules

This mapping must be documented and approved before migration.

Data Transformation

Data transformation may be required to ensure compatibility with the new ERP structure. Transformation activities may include:

- Data format standardization

- Data cleansing and removal of duplicate records
- Alignment with new Odoo data structures

Any transformation applied to the data must be documented.

Data Loading

Transformed data shall be loaded through controlled, repeatable and logged migration procedures. Loading shall ensure:

- Data completeness
- Preservation of relational data structures
- Accurate linking of records

Migration scripts or tools must be used to automate this process.

Data Validation

After migration, the system must validate migrated data to ensure accuracy. Validation must include:

- Verification of employee records
- Payroll data reconciliation
- Budget and analytic account verification
- Financial balance verification

Any discrepancies must be identified and corrected before system go-live.

Migration Testing

The implementation partner must perform migration testing including:

- Test migration using sample datasets
- Full migration testing in a staging environment
- Verification of business workflows using migrated data

This testing ensures that the migrated system operates correctly.

Data Backup & Recovery

Before starting migration, a full backup of the existing ERP database must be taken. The migration process must ensure:

- Backup of original system data
- Ability to restore data if migration issues occur
- Preservation of historical records for audit purposes.

Non Functional Requirements

Overview

Non-Functional Requirements define the operational qualities and performance expectations of the ERP system. These requirements ensure that the system operates securely, reliably, and efficiently across all KPTEVTA organizational units including:

- Head Office departments and sections
- Field Institutes
- Employment Exchange Offices

The ERP platform must support stable, scalable, and secure operations for all modules implemented within the system.

Measurable Service and Acceptance Baseline

Values marked TBD must be approved before the relevant design or contract baseline. The implementation partner shall propose test conditions, expected volumes and evidence for each target.

ID	Measure	Baseline target	Acceptance evidence
NFR-01	Availability	TBD service window and monthly percentage; exclude approved maintenance only.	Monitoring report and outage log.
NFR-02	Interactive response	TBD percentile target for agreed common transactions under representative load.	Performance-test report with dataset and concurrency.
NFR-03	Reporting	TBD targets by operational, management and large analytical report class.	Timed report tests and query review.
NFR-04	Concurrent users	TBD named and peak concurrent users by location and role.	Load test at approved peak plus growth margin.
NFR-05	Backup / RPO	Backup frequency, retention, encryption and recovery point objective - TBD.	Backup logs and successful restore test.
NFR-06	Disaster recovery / RTO	Recovery time objective, failover process and responsible parties - TBD.	Documented recovery exercise.
NFR-07	Security	MFA scope, password/session rules, vulnerability remediation windows and penetration-test scope - TBD.	Security configuration review and test reports.
NFR-08	Audit retention	Retention by log/record class and authorized access - TBD.	Retention configuration and retrieval test.
NFR-09	Integration reliability	Retry, duplicate prevention, reconciliation and alert thresholds per interface.	Interface failure and recovery scenarios.
NFR-10	Migration accuracy	100% control-total reconciliation for agreed financial/payroll totals; record-level sampling thresholds - TBD.	Signed reconciliation pack and exception closure.

System Performance

The ERP system must deliver efficient performance for all users and transactions. Requirements include:

- The system must support concurrent access by multiple users across all KPTEVTA locations.
- Standard user transactions (data entry, record retrieval, approvals, etc.) must respond within acceptable time limits.
- Dashboard and analytical-report response targets shall be agreed by report type and data volume, then verified through performance testing.
- The system must support future growth in users, institutes, and data volumes.

System Availability

The ERP system must provide high availability to ensure continuous operations. Requirements include:

- The system shall meet the approved availability target during agreed service hours across KPTEVTA locations.
- Planned maintenance must be scheduled outside operational hours where possible.
- The system must provide mechanisms for quick recovery in case of system failure.

Scalability

The ERP system must be capable of scaling as organizational requirements grow. The system must support:

- Addition of new institutes and offices
- Increase in system users
- Expansion of ERP modules
- Growth of historical data

The architecture must support long-term expansion without major system redesign.

Security Requirements

The ERP system must ensure protection of sensitive organizational data. Security capabilities must include:

- Role-based access control
- Secure user authentication
- Password policies and access management
- Protection against unauthorized data access

Sensitive data such as payroll records, financial transactions, and employee information must only be accessible to authorized users.

Data Privacy & Confidentiality

The system must ensure that confidential data is protected. Requirements include:

- Restricted access to sensitive documents
- Secure handling of employee and trainee information
- Controlled sharing of documents between departments and offices

Confidential records shall be accessible only to authorized personnel.

Audit & Traceability

The system must maintain a complete audit trail for critical activities. Audit logs must record:

- User actions
- Data modifications
- Approval actions
- Financial transactions
- User identity
- Date and time
- Description of activity

These logs must support compliance and administrative accountability.

Data Backup

The system must support regular backup of ERP data. Backup requirements include:

- Scheduled database backups
- Secure storage of backup copies
- Ability to restore system data in case of failure

Backup procedures must ensure protection of organizational records.

Disaster Recovery

The ERP system must support disaster recovery mechanisms. The system must provide:

- Recovery procedures for system failures

- Restoration of database backups
- Minimal data loss during recovery

These measures must ensure continuity of operations in case of system disruptions.

System Integration

The ERP system must support integration between different modules and external systems. Integration must support:

- Data sharing between ERP modules
- Integration with biometric attendance devices
- Integration with payment gateways
- Integration with national systems (where applicable)

All integrations must ensure secure and reliable data exchange.

Usability Requirements

The ERP system must provide a user-friendly interface. Usability requirements include:

- Intuitive system navigation
- Easy data entry and record retrieval
- Dashboard-based monitoring
- Minimal training required for standard users

The system must support efficient workflows across all KPTEVTA offices.

Reporting & Analytics Performance

The system must support efficient generation of reports and dashboards. Requirements include:

- Real-time dashboard updates
- Efficient generation of analytical reports in dynamic and drill-down form
- Support for exporting reports in PDF and Excel formats

Reports must support operational monitoring and decision making.

Compliance & Standards

The ERP system must comply with applicable organizational and regulatory requirements. These include:

- Government & KPTEVTA financial reporting standards
- Data security policies
- Internal administrative procedures

The system must support transparency and accountability in public sector operations.

System Documentation

The ERP implementation partner must provide complete system documentation including:

- System architecture documentation
- Configuration documentation
- User manuals
- Technical documentation

This documentation must support system maintenance and future upgrades.

Training Requirements

The ERP implementation partner must provide training to users including:

- System administrators
- Department, institute & EE users
- Finance and HR users

Training must include

- System operations

- Data entry procedures
- Report generation

Training materials shall be provided for future reference.

Maintainability & Support

The ERP system must be designed for easy maintenance and long-term support. Requirements include:

- Modular system architecture
- Clear documentation of system configurations
- Ability to update system modules without affecting existing operations

The implementation partner must provide post-deployment support for system stabilization.

Appendix A - Indicative Odoo Fit-Gap and Delivery Approach

The classification below is an implementation hypothesis based on the target Odoo 19 product family. It must be validated against the selected Odoo edition, licenses, hosting model, installed localizations and a configured prototype before commercial commitment.

Area	Likely standard/configuration base	Likely extension or integration
Procurement	Purchase, approvals, vendor records, RFQs, POs and receipts.	Public-sector approval thresholds, procurement-plan controls, detailed bid evaluation and budget blocking.
Inventory and quality	Warehouses, locations, transfers, barcode, serials, reordering and Odoo Quality checks.	Institute-specific holds, acceptance statuses, asset handover and policy-driven issue approvals.
Accounting and budget	Accounting, analytic accounts/plans, assets, payments and core reporting.	Government chart/reporting, commitment control, grant rules, FBR/bank interfaces and public-sector approval matrix.
HR and payroll	Employees, recruitment, attendance, time off, payroll framework and Pakistan payroll localization baseline.	KPTEVTA service rules, biometric/ADMS gateway, CPF/gratuity, public-sector reports and transfer/service-book workflows.
Student lifecycle	Portal, contacts, accounting, documents, surveys and selected eLearning components may be reused.	Purpose-built trainee information and progression module, with approved external interfaces and explicit examination and credential exclusions.
Fleet	Vehicle, driver, odometer, services, accidents and cost reporting base.	Trip approvals, fuel-card controls, telematics, institute transfers and specialized compliance documents.
Civil works	Projects, tasks, milestones, documents, purchase, accounting and analytic cost collection.	WBS governance, BOQ/measurement, interim payment certificates, variation/retention/EOT and physical-progress controls.
Diary and DMS	Documents, Sign, Approvals, activities, email and record attachments.	Government diary numbering, file noting, hierarchical movement, QR file custody, retention and legally approved digital signatures.
BI and advanced analytics	Native pivots, graphs, dashboards and spreadsheets for operational reporting.	Cross-module semantic model, data warehouse, geospatial analysis and optional predictive models with governance.
Migration	Odoo imports and APIs support controlled loading of suitable data.	Repeatable ETL, Flectra mapping, reconciliation, attachment history, audit preservation and archive solution.

Appendix B - Open Decisions and Policy Inputs

The following items must be resolved during discovery or solution design and approved by the named KPTEVTA authority:

ID	Decision required	Why it matters / owner
OD-01	Confirm Odoo edition, hosting model, target release freeze and supported upgrade path.	Determines available apps, security operations, custom-code approach and recurring cost. Owner: Steering Committee/IT.
OD-02	Approve the company/branch/institute, warehouse and analytic-account architecture.	Controls segregation, consolidation, access and reporting. Owner: Finance, HR, Operations and IT.
OD-03	Approve the detailed budget-control model and commitment points.	Defines hard blocks at PR, PO, receipt, bill and payment stages. Owner: Finance/Budget.
OD-04	Identify each relevant external authority and confirm permitted data exchange, documents and publication rights.	Defines interface, information-governance and publication boundaries. Owner: Training, Legal/Compliance and IT.
OD-05	Approve student progression, internal completion, intervention and external-result verification rules.	Required for workflow, portal wording and audit design. Owner: Training/Institutes.
OD-06	Confirm payment providers, commercial agreements, APIs and reconciliation ownership.	Required before committing 1Link/1Bill, Raast, JazzCash or Easypaisa integrations. Owner: Finance/IT.
OD-07	Confirm biometric device inventory, ADMS/API behavior, network constraints and source-of-truth rules.	Required for reliable employee and trainee attendance. Owner: HR/Training/IT.
OD-08	Approve retention periods, legal holds and access rules by record class.	Required for HR, finance, trainee, correspondence and document archives. Owner: Legal/Records/IT.
OD-09	Approve performance, availability, RPO, RTO, audit-retention and concurrency targets.	Required for architecture, hosting sizing, SLA and acceptance tests. Owner: IT/Steering Committee.
OD-10	Define migration history, cut-off dates, archive scope and reconciliation thresholds.	Prevents an unbounded 'migrate everything' commitment. Owner: Data owners/Finance/HR/IT.
OD-11	Confirm legally accepted digital-signature method and certificate authority requirements.	Odoo electronic signing capability does not by itself settle public-sector legal acceptance. Owner: Legal/Administration/IT.
OD-12	Prioritize optional AI/predictive analytics and approve model governance.	Should not block core ERP delivery and must not make adverse automated decisions. Owner: Steering Committee/Data Governance.

Appendix C - FRS Completion Checklist

- Each requirement has an owner, priority, implementation class and acceptance evidence.
- All policy values marked TBD are approved or formally deferred with impact recorded.
- Student lifecycle scope, status definitions and external-result controls are agreed.
- External outcomes identify the issuer, source, verification status and correction history.
- Cross-module ownership of vendors, partners, employees, trainees, institutes, assets, documents and analytic dimensions is agreed.
- Custom extensions have functional/technical designs, automated or repeatable tests and upgrade notes.
- Every integration has an interface owner, security controls, error queue, retry rules and reconciliation process.
- Migration scope is supported by mapping, trial loads, reconciliation evidence and a signed cutover plan.
- NFRs are measurable and included in the contract/UAT acceptance pack.
- Training material, SOPs, configuration records and support handover are complete before closure.

Appendix D - Product Capability References

The functional classification is informed by official Odoo 19 documentation available on the issue date. These references support fit-gap planning; they do not replace a configured proof of concept or contractual scope statement.

- **Odoo 19 application index:** [open official documentation](#)
- **Analytic accounting and analytic budgets:** [open official documentation](#)
- **Quality checks:** [open official documentation](#)
- **Fleet:** [open official documentation](#)
- **Documents and productivity apps:** [open official documentation](#)
- **Odoo Sign:** [open official documentation](#)
- **Payroll localizations:** [open official documentation](#)
- **eLearning:** [open official documentation](#)