

Objectives and Scope of Work

The detail objectives and scope of work is presented as follows:

1.1 Objective of the Assignment

The objective of this assignment is to engage an independent Third-Party Validator (TPV) to conduct comprehensive, evidence-based validation, performance audit, monitoring, verifications and tracer studies across PSEB's ongoing skill-development projects, namely Component III (Capacity Building of IT Industry in Specialized Technologies & Platforms), Revamping IT Industry Landscape, and the National Semiconductor HR Development Program (NSHRDP). The TPV shall independently verify the authenticity, accuracy, and completeness of reported outputs and outcomes, including trainee/beneficiary enrolment, certification, placement, and stipend disbursement records; assess training-partner and institutional delivery quality against agreed curricula and standards; conduct beneficiary tracking and post-training tracer studies to measure employment, income, and career-progression outcomes; verify compliance with approved PC-I objectives, targets, and financial parameters; identify implementation bottlenecks, risks, and systemic gaps; and provide actionable, time-bound recommendations to the Project Steering Committees and PSEB management. The assignment is intended to ensure transparency, strengthen results-based accountability, support evidence-informed decision-making, and provide independent assurance to the Government of Pakistan, financing/oversight bodies, and stakeholders that public resources are achieving the intended developmental impact that include:

Tracer Study Sub-Objectives:

1. Verify the current employment status of program beneficiaries, including employed, self-employed, unemployed, freelance, and entrepreneurial engagements.
2. Document the nature of employment and collect information regarding job roles, sectors, and employment arrangements.
3. Verify the relevance of employment to the training received under PSEB-supported programs.
4. Collect and document information regarding utilization of skills acquired through the training programs.
5. Document beneficiary-reported income ranges and employment progression following program completion.
6. Record beneficiary feedback regarding training completion and post-training outcomes.
7. Identify and document factors reported by beneficiaries that may affect employment outcomes.
8. Track geographic mobility of beneficiaries, including relocation for employment opportunities within Pakistan and abroad.

9. Verify and document key outcome indicators of PSEB's skill development initiatives through independent data collection, validation, and reporting.

Performance Audit Sub-Objectives:

Conduct a programmatic performance audit of the relevant skill development components/initiatives to assess effectiveness against approved PC-I objectives, planned outputs, timelines, milestones, beneficiary targets and implementation arrangements.

Identify courses of action to remove implementation bottlenecks, structural constraints and procedural barriers that may delay project outputs or reduce effectiveness.

Assess whether monitoring, procurement, training delivery, beneficiary selection, course/curriculum alignment, reporting and coordination processes are enabling timely achievement of project outputs and outcomes.

1.2 Scope of Work

The contractor/firm shall be responsible for carrying out all activities related to Third-Party Validation, Performance Audit, Monitoring, Verification and Tracer Studies, including beneficiary tracking, data collection, outcome verification, implementation effectiveness assessment, PC-I/output compliance review, bottleneck analysis and reporting, for the ongoing projects listed below:

1.3 Ongoing Projects:

On-going Skills Development projects / initiatives, are:

(i) Component III, Capacity Building of IT Industry in Specialized Technologies & Platforms (Skill Development), under the Prime Minister's Initiative for Support to IT Startups, Specialized IT Trainings and Venture Capital,

(ii) Revamping IT Industry Landscape, over a 36-month gestation period, delivered through three synchronized components, HR/Skills Development, Ecosystem Development (policy, regulatory and capital-market reforms), and Marketing & Branding ("Tech Destination Pakistan") targeting an increase in national IT exports and creation of new jobs; and

(iii) the National Semiconductor HR Development Program (NSHRDP) over 60 months, aimed at producing skilled chip-design engineers through Semiconductor Education & Research Clusters (SERCs), Up-Skilling Training Programs (USTPs), and Centralized EDA Tools/IP Repository facilities.

The approximate numbers of beneficiaries are as under:

S. No	Project Name	No. of Trainees (Approximate)	Project Start Date	Expected End Date
1	Prime Minister Initiative Support for IT Startup, Specialized IT Trainings & Venture Capital (Component-III)	8,446	16/02/2024	31/12/2026

2	Revamping IT Industry Landscape	20,950	07/07/2025	06/07/2028
3	National Semiconductor HR Development Program	7,200	20/05/2025	19/05/2030
Notes: i. Initiatives under the above-mentioned projects are taking place across Pakistan. ii. PSEB reserves the right to increase or decrease trainee/beneficiary numbers within the approved contract mechanism and contractual provisions. iii. Contract duration, extension and availability of funds are set out under "Contract Duration, Extension and Availability of Funds".				

1.4 Contract Duration, Extension and Availability of Funds:

The contract tenure for this assignment shall be two (02) years from the date of contract signing. The contract may be extended for the remaining project period on satisfactory performance, subject to approval of the competent authority and availability of funds. The contract may further be extended on mutual consent, on a project/activity-wise basis, up to the respective project life, at PSEB/management's discretion and subject to availability of funds. PSEB reserves the right to increase or decrease trainee/beneficiary numbers and to extend the contract period up to the relevant project life, within the approved contract mechanism and contractual provisions. Payment shall remain linked to approved deliverables, written acceptance by PSEB, and availability of budget, as further detailed under "Deliverables".

1.5 Performance Audit, Effectiveness Evaluation and Bottleneck Analysis

The contractor shall conduct a programmatic performance audit and effectiveness evaluation of the Projects and relevant skill development components/initiatives, including the Skill Development Component-III where applicable, against approved PC-I objectives, planned activities, output targets, timelines, milestones, implementation responsibilities and reporting requirements.

The performance audit shall review whether project activities are being implemented as planned and shall identify reasons for delayed outputs, under-achievement, non-compliance, weak coordination, beneficiary selection issues, training delivery constraints, documentation gaps, course/curriculum relevance gaps, or other structural and procedural barriers affecting project performance.

The contractor shall provide practical courses of action and corrective recommendations to remove bottlenecks, strengthen implementation processes, improve output delivery, enhance governance and coordination, and support timely completion of PC-I targets. This shall be a programmatic performance audit and implementation effectiveness review, and shall not be treated as a statutory financial audit unless expressly required by PSEB.

1.6 Project Management

Project Planning: Develop a detailed implementation plan outlining activities, timelines, milestones, and deployment of required human resources.

Team Coordination: Assign and manage a dedicated project team, including project managers, field teams, call operators, data entry personnel, and quality assurance staff.

Stakeholder Communication: Maintain regular communication with Pakistan Software Export Board (PSEB) stakeholders, providing periodic updates on progress, field activities, and operational status.

1.7 Survey Design

Questionnaire Development: Design a comprehensive, close-ended survey questionnaire in close coordination with Pakistan Software Export Board (PSEB), based on PSEB's targeted outcomes, availability of existing demographic and program data, and the type of analysis to be conducted later. Ensure that the questionnaire reflects PSEB's monitoring and evaluation priorities and that all questions are clear, concise, and culturally appropriate.

Pilot Testing: Conduct a pilot survey with a small subset of graduates to identify and rectify any issues with the questionnaire or survey methodology.

Finalization: Refine the questionnaire based on pilot test feedback and obtain Pakistan Software Export Board (PSEB)'s approval before full-scale deployment.

Focus Groups: Conduct structured focus group discussions with a representative subset of graduates to capture their experiences, perceptions, and feedback on training and employment outcomes.

In-Depth Interviews: Carry out one-on-one interviews with key stakeholders, including employers, trainers, and selected graduates, to gather detailed insights into program relevance, skills gaps, and industry expectations. These interviews will help contextualize survey findings and highlight areas for improvement.

1.8 Data Collection

Survey Administration and Coverage: Conduct phone-based surveys using trained interviewers with multilingual support (e.g., Urdu and regional languages) as needed. The contractor shall attempt to contact 100% of the respondent database provided by PSEB for the relevant survey cycle, subject to availability and correctness of contact information.

Call Scheduling: Optimize call times based on best practices to maximize response rates (e.g., evenings on weekdays, weekends).

Follow-up Attempts: Implement a protocol of three (03) call attempts per respondent, where required, to enhance response rates. Each attempt shall be recorded with date/time, call outcome and response status.

Data Recording: Accurately record responses in a secure, digital format with appropriate anonymization measures.

Contact Attempt Reporting: The contractor shall submit a respondent-level contact attempt report showing respondent reference/ID, number of attempts, attempt dates/times, call outcome, completion status, and reason for non-completion where applicable (e.g., switched off, not responding, wrong number, refused, unreachable, or duplicate record).

1.9 Data Processing

Data Entry and Cleaning: Ensure all survey responses are accurately entered into a secure database. Perform data cleaning to remove duplicates, correct errors, and handle incomplete responses.

Anonymization and Pseudonymization: Protect participant identities by anonymizing or pseudonymizing personal data before analysis.

Data Security: Implement robust security measures, including encryption and secure storage, to protect sensitive data.

1.10 Data Analysis

Conduct insightful and quantitatively rigorous analysis of survey results providing a comprehensive assessment of Pakistan Software Export Board (PSEB). This may include:

Descriptive Statistics: Provide summaries of key metrics such as employment rates, income levels, and job satisfaction scores.

Cross-tabulation and Comparative Analysis: Analyze relationships between variables (e.g., employment status by gender, income by region etc.).

Trend Analysis: Assess how outcomes vary based on the time since graduation and program duration.

Factor Analysis: Identifying underlying relationships between multiple survey variables. E.g., what factors (e.g., job relevance, training quality, and certification value) most influence job satisfaction or employability.

Impact Analysis: Measures the overall effectiveness of Pakistan Software Export Board (PSEB)'s training programs in improving the employment prospects and income levels of graduates. E.g., how much higher is the employment rate for Pakistan Software Export Board (PSEB) graduates compared to national averages for similar demographics (if benchmark data is available)?

Advanced Analytics: Perform regression analysis, factor analysis, or cluster analysis as needed to uncover deeper insights.

Gap Analysis: Identify discrepancies between expected and actual outcomes to highlight areas for improvement.

Cohort Analysis: Conduct cohort-based analysis to identify variations in outcomes by program type, region, gender, and graduation year, enabling policymakers to understand differential impacts.

Benchmarking: Where feasible, benchmark tracer study findings against similar studies conducted in regional or global contexts (e.g., India, Bangladesh, Vietnam) to provide comparative insights for policymakers.

1.11 Progress Tracking During Data Collection

a. Weekly or Biweekly Progress Reports

Description: Provide biweekly progress reports during monitoring, onsite validation, tracer survey and evaluation data collection activities. These reports shall outline key metrics, progress against planned activities, completed monitoring visits, survey progress, response status, emerging issues, corrective actions, and any operational challenges.

Format: Progress reports can be shared in Excel or PDF formats and may include visual aids like bar charts or pie charts to easily interpret the data.

Purpose: Their reports can track the pace of data collection, address challenges early, and ensure the study remains on schedule.

b. Real-time Dashboard for Study Monitoring

Description: Alternatively, the partner organization can set up a real-time tracking dashboard that displays key metrics on the study's progress. This can be a live database or tool (e.g., Google Data Studio, Power BI, or an in-house reporting tool).

Format: A web-based, interactive dashboard that updates in real time as the partner organization submits data.

Purpose: Enables continuous monitoring of progress without waiting for formal reports, allowing for timely interventions if necessary.

1.12 Interim Findings Report

In addition to progress updates, provide mid-term analytical findings report that highlights preliminary trends and emerging insights. This interim report will enable PSEB to validate the direction of the study, make course corrections if necessary, and maximize the policy relevance of final outputs.

1.13 Final Reporting and Knowledge Dissemination After Data Collection

Once the survey is completed, the data needs to be analyzed and reported in a structured manner.

a. Summary Report

Description: A high-level summary report that outlines key findings from the tracer study.

Format: PDF or Word document with an executive summary and high-level insights supported by charts, tables, portal and graphs.

Purpose: Provides a concise overview of the most important outcomes for senior decision-makers and stakeholders.

b. Detailed Analytical Report

Description: A comprehensive, in-depth report that presents a detailed analysis of all data collected.

Format: Structured as a PDF or Word report with sections for methodology, data analysis, key findings, and recommendations. This report would include detailed charts, graphs, and tables.

Purpose: Serves as a full record of the study and provides actionable insights for policy formulation, future program design, or stakeholder reporting.

c. Interactive Data Dashboard

Description: An interactive dashboard that allows stakeholders to explore the survey results on their own by filtering data based on program, region, gender, and employment outcomes. Tools like Power BI, Tableau, or Google Data Studio can be used.

Format: Web-based dashboard accessible to key stakeholders. **Purpose:** Allows for a more dynamic, self-service exploration of the data beyond static reports.

1.14 Data Privacy and Compliance

The contractor shall adhere to PSEB's Data Protection Policy, Privacy Regulations, and all applicable laws governing the collection, processing, storage, transmission, and protection of beneficiary information. All data collected during the assignment shall be treated as confidential and shall not be used for any purpose other than this assignment without the prior written approval of PSEB.

1.15 Quality Assurance

Training: Provide comprehensive training for survey administrators on questionnaire administration, data privacy, and ethical considerations.

Validation Checks: Conduct random validation checks by re-contacting selected graduates to verify data accuracy. The validation exercise must be carried out by a separate team.

Audits: Perform regular audits of data collection and processing procedures to ensure adherence to quality standards.

2. DELIVERABLES

2.1 Inception Report: (One Time)

- Requirement: Detailed timeline, milestones, and resource allocation within 30 days of contract signing. All tools for data gathering, including a structured survey questionnaire and interview guide.
- Deliverable: Submitting Inception Report with a clear project roadmap, aligns expectations, and serves as a baseline reference for the study's progress. Ensures standardized and reliable data collection across diverse participants.

TPV, monitoring and verification shall be carried out for running initiatives/cohorts during implementation. For completed initiatives/cohorts, evaluation and tracer assessment shall be conducted based on available records, beneficiary follow-up and approved evaluation tools.

- Tracer study of each initiatives/cohorts/component year wise.

2.2 Survey Design and Tools: (One Time)

- Beneficiary surveys design along with detailed questionnaire for each of ongoing skills/training projects including:
 - Key Informant Interviews design (employers, providers, managers).
 - Focus Group Discussions with beneficiaries.
 - Batch information (location, participants, completion status).
 - Beneficiary coverage (enrolled, ongoing, completed – gender/region breakdown).
 - Trainee feedback and preliminary outcome trends.
 - Trainer performance summary.

2.3 Data Collection and Progress Report: (Quarterly Basis)

- Conduct data collection through monitoring, onsite visits, performance audit and verification activities using monitoring indicators, performance audit tools, implementation review checklists and evaluation instruments developed and approved for the purpose.

- Conduct tracer survey and performance/effectiveness evaluation activities as per agreed timelines and methodology, and collect monitoring, validation, evaluation, performance audit and tracer datasets for each project/initiative.

Submit a 100% survey attempt coverage report for the provided respondent database, including completed, partially completed, refused, unreachable, wrong-number, switched-off, not-responding and other non-completion categories.

- Apply data analytical/BI Tools to analyze the data sets collected through the quarterly survey.
- Submit progress and performance audit report against each project/initiative identifying discrepancies, non-compliance, delayed outputs, procedural barriers, structural bottlenecks, training delivery issues, attendance/participation issues, quality of delivered content, skillset development, employability and implementation risks.
- Recommendations and courses of action to improve weak areas, remove bottlenecks, address structural/procedural barriers and accelerate achievement of project outputs.

2.4 Yearly Tracer Study of each Project/Initiative

- Final Tracer Study Report with analytical analysis out of quarterly reports and this should comprise of at least:
 - Executive summary and key insights
 - Methodology and data collection approach
 - Final results and policy recommendations
 - Final dataset & documentation (codebook, notes).
 - Dissemination workshop with stakeholders.
 - Validation checks, audits, and quality control measures.
 - Detailed findings and data visualizations (graphs, charts)
 - Recommendations for curriculum improvements, industry alignment, and policy adjustments
 - Assessment of Employability of each project/initiative.
 - Provides a full narrative of the study, enabling policymakers, training institutions, and industry leaders to make data-driven decisions.

2.5 Reporting Frequency with Timelines and Deliverables

A comprehensive Final Tracer Report of all Projects/Initiatives at completion of contract tenure.

Sr. No.	Deliverables	Frequency	Time Allocated (Calendar Days)
1	Project setup, governance framework, PC-I/data readiness, software/application development kick-off and reporting structure	One-time	Day 15
2	Inception Report, implementation plan, methodology, work breakdown structure, survey protocol, performance audit framework and risk plan	One-time	Day 30
3	Survey design and tools, performance audit tools/checklists, software / application configuration, dashboard framework, data structure, SOPs, Questionnaire Design and pilot readiness	One-time	Day 45
4	Submission of Data Collection, Performance Audit and Progress Report (TPV, Monitoring, Verification and Implementation Review of completed/on-going and up-coming activity)	Quarterly	Within 15 days after completion of each financial quarter
5	100% Survey and Monitoring Attempt Coverage Report and Validation Check Report	Continuous	Upon completion of the initial full survey cycle and validation checks per initiative.
6	Yearly TPV, Tracer Study, Performance Audit and Effectiveness Evaluation of each Project/Initiative	Yearly	Within one month prior of financial year completion
7	Final TPV Completion Report, Consolidated Tracer, Performance Audit and Effectiveness Evaluation Report	Project Based	Within one month of completion of project
8	Final TPV Completion Report, Consolidated Tracer, Performance Audit and Effectiveness Evaluation Report	At completion of contract tenure	Within two months prior of completion of project contract tenure

***Note:-**

- Year means Financial Year starting from July to June
- Each Quarter means Financial Quarter, i.e., Q1 (Jul-Sep), Q2 (Oct-Dec), Q3 (Jan-Mar) & Q4 (Apr-Jun).

- iii. The contract tenure shall be two (02) years from the date of contract signing, extendable up to the remaining project period/project life on a project/activity-wise basis, subject to satisfactory performance, approval of the competent authority, and availability of funds, as set out under "Contract Duration and Extension" above. Deliverables shall be submitted within the timelines stated above and shall be subject to written acceptance by PSEB. Detailed payment disbursement shall be regulated separately through the contract conditions and shall not be treated as part of the technical evaluation criteria.
 - iv. All deliverables must comprehensively cover their respective initiatives, including completed, ongoing, and upcoming activities under the said projects.
 - v. Detailed payment disbursement percentages have intentionally not been included in this RFP. Payment terms shall be governed through the signed contract, General/Special Conditions of Contract and applicable government financial rules, and shall remain linked to approved deliverables, written acceptance by PSEB, availability of budget, and any applicable contractual safeguards.
 - vi. All reports shall be submitted in both hard and soft copy, in formats prescribed by PSEB, and presented to the Project Steering Committee for review and validation.
 - vii. Frequencies indicated are minimum requirements; PSEB/Steering Committee may request ad-hoc or special-purpose validation exercises as needed.
 - viii. Data collection and verification tools (surveys, checklists, sampling frames) shall be approved by PSEB prior to deployment in the field.
- The TPV firm shall maintain independence and shall not have any conflict of interest with training partners, universities, or implementing entities under these projects.

Payment Provision:

Payment shall be made only upon PSEB's written acceptance of approved deliverables. Detailed payment disbursement, invoice processing requirements, deductions, taxes, and any applicable safeguards shall be governed by the signed contract, General/Special Conditions of Contract, and applicable government financial rules.

The Contractor shall provide all necessary supporting documents along with GST invoice, and other relevant documents as required by the Pakistan Software Export Board (PSEB) management.

The payment will be made upon approval by Pakistan Software Export Board (PSEB) management.