1. INTRODUCTION TO PSEB

The Pakistan Software Export Board (PSEB), operating under the Ministry of Information Technology and Telecommunication (MoITT), is the apex body mandated to promote and facilitate the development of Pakistan's Information Technology (IT) and Information Technology Enabled Services (ITeS) sector. PSEB works to enhance the competitiveness of Pakistan's IT industry in global markets through policy advocacy, capacity building, market development, and ecosystem facilitation.

Under the Revamping IT Industry Landscape project, approved under PC-1 by the Ministry of IT & Telecom, Government of Pakistan, the Pakistan Software Export Board (PSEB) is mandated to undertake a series of policy studies to strengthen the country's IT ecosystem. These initiatives fall under Sub-Component I: Policy Analysis, Formulation & Reforms studies within Strategic Ecosystem Development.

Strategic Pillar-I focuses on creating an enabling environment that supports IT and ITeS companies and professionals in delivering competitive products and services to global markets while enhancing Pakistan's attractiveness as a destination for domestic and foreign investment. Achieving these objectives requires addressing key policy, regulatory, and institutional challenges through evidence-based analysis and practical reform recommendations.

To this end, PSEB will commission a range of specialized analytical studies to develop policies, frameworks, and actionable solutions that strengthen the sector's competitiveness and long-term growth. Where appropriate, these assignments will be undertaken by internationally recognized firms, in collaboration with local partners, to leverage global expertise, best practices, and contextual local knowledge.

In line with the objectives of the Revamping IT Industry Landscape project, PSEB hereby invites sealed Expressions of Interest from eligible firms or consortiums to provide consultancy services for the three policy studies/consultancies described in this Expressions of Interest (EOI). The selected firm will undertake comprehensive analysis and develop evidence-based recommendations, policy frameworks, and implementation roadmaps to support reforms aimed at strengthening Pakistan's IT and ITeS ecosystem.

2. IMPORTANT INFORMATION

1. The applicant firms must submit an EOI for all three components as an integrated assignment. Partial applications shall not be considered.
2. Any bidder, including any consortium or joint venture member, previously found by PSEB or any government entity to have submitted forged, falsified, or tampered documents in any procurement process shall be considered non-responsive and shall not be evaluated.
3. PSEB reserves the right to reject any or all bids/proposals at any time prior to acceptance of a bid/proposal in accordance with PPRA Rules, 2004. Upon request, PSEB shall communicate to the concerned bidder the grounds for rejection; however, it shall not be required to justify such grounds beyond the requirements of the applicable PPRA Rules.

3. BACKGROUND AND OBJECTIVES

3.1 Project Background

Pakistan's IT/ITeS sector has significant growth potential, but the domestic ecosystem requires addressing several structural issues and making targeted improvements in policy, regulation, finance, and legal frameworks. To diagnose and address these challenges, a number of detailed analytical consultancies/studies are required to prepare actionable policies, frameworks, and solutions.

Under the project 'Revamping IT Industry Landscape' - a PC-1 approved project under the Ministry of IT & Telecom, Government of Pakistan - PSEB is mandated to engage reputable firms (including international firms, in consortium with local companies) to conduct three key consultancies/studies.

3.2 Overall Objectives

- The overarching objectives of these three consultancies/studies are to:
- Diagnose structural, regulatory, legal, and market gaps in Pakistan's IT/ITeS ecosystem.
- Develop evidence-based, actionable policy recommendations and frameworks.
- Align Pakistan's IT ecosystem with international best practices and global competitiveness standards.
- Provide the Government of Pakistan and PSEB with implementation-ready tools, models, and policy documents.
- Attract international expertise, investment, and partnerships to the IT sector.
- Provide a comprehensive and centralized repository of information on the IT/ITeS companies (segregation as product-based and services-based)
- Provide a verifiable record of IT professionals, freelancers, gig workers, and remote workers
- Provide a standardized classification of workforce skills, technology domains, and company specializations
- Provide a central dataset to support evidence-based policy, strategic planning, and investment promotion
- **Strategic alignment.** Contribute measurably to the PC-1 mission of growing Pakistan's IT/ITeS exports — including the project's target of an additional USD 450–500 million in exports by project end and the national ambition of USD 15–18 billion by 2028-29 — by improving the business environment, capital-market access and the innovation ecosystem for IT/ITeS firms and professionals.
- **Ecosystem enablers.** Deliver implementation-ready policies, frameworks and draft instruments mapped to the ecosystem-related enablers of the approved national roadmap — the legal, regulatory and governance framework; tax legislation and harmonisation; banking reform; and equity, investment and debt financing.
- **Delivery focus.** For every recommendation, specify the responsible owner responsible for taking actions, the activities required and a realistic Now / Next / Beyond delivery plan aligned to the PC-1/Project timeline (see Section 3.3), so that outputs translate into adopted reforms in the shortest feasible time rather than remaining diagnostic.

3.3 Cross-Cutting Requirements for All Studies

The following requirements apply to each study/consultancy under this assignment. They keep every study outcome-based, sequenced and owned, and are intended to sharpen — not expand — the individual scopes of work.

- **Now / Next / Beyond delivery plan.** Each study shall deliver a detailed, actionable Now / Next / Beyond implementation plan across three horizons aligned to the PC-1 (not fixed calendar periods): NOW — actions achievable within the remaining project period using existing PSEB/MoITT authority and requiring no legislation, contributing to near-term export gains; NEXT — policies, frameworks and instruments to be adopted by project end, delivering the targeted export increment; and BEYOND — reforms to be institutionalised and sustained through 2028-29 toward the national export ambition. For each horizon the firm shall provide concrete, ready-to-use interventions with the specific activities, responsible/owning entities, sequencing, timeframes and the intended outcome; the greater the actionable, implementation-ready detail, the better.
- **Stakeholder identification and engagement.** The stakeholders named for each study are indicative, not exhaustive. During inception the firm shall assess needs and identify all other relevant stakeholders (public, private, academia, provincial governments, freelancer/gig and investor communities, and others), record them with the proposed engagement approach in the Inception Report for PSEB's endorsement, and then conduct the consultation and engagement sessions with these additional stakeholders as well, documenting their inputs and how these shaped the recommendations.
- **Implementation-ready outputs.** Deliverables shall go beyond analysis to provide the instruments needed to act — draft policies/frameworks, draft notifications/SROs or amendment notes where applicable, SOPs, financial models and templates — each with a named responsible owner and a short sustainability plan.
- **Results orientation.** Each study shall define outcome indicators (with baseline and target) linking its recommendations to the PC-1 export and ecosystem results, for monitoring by the PMO.
- **Benchmarking.** Where international comparison is used, the firm shall benchmark against leading comparable economies that have achieved rapid, sustained IT/ITeS export growth and draw transferable lessons, described by their relevant characteristics, models and instruments rather than by naming specific countries.
- **Evidence base.** The firm shall avoid duplicating work already completed, and focus effort on gaps, instruments and implementation.

4. SCOPE OF WORK

COMPONENT 1:

STUDY FOR HARMONIZATION BETWEEN STZA AND STPS/ITPS

CONSULTANCY/STUDY FOR EASE OF DOING BUSINESS - LEGISLATION & JUDICIARY, TAX REFORMS, BANKING REFORMS, IP RIGHTS FOR LOCAL & INTERNATIONAL COMPANIES

Component 1 comprises two closely related sub-components to be undertaken as a single integrated assignment by firm/consortium, with coordinated stakeholder consultations and a unified programme of work.

4.1 Sub-Component A: Study for Harmonization between STZA and STPs/ITPs

4.1.1 Background and Rationale

Software Technology Parks (STPs) and Information Technology Parks (ITPs) are established components of Pakistan's IT ecosystem where IT and ITeS companies operate and receive various fiscal and non-fiscal benefits. Special Technology Zones (STZs), under the Special Technology Zones Authority (STZA), are relatively newer components with a distinct mandate, entry criteria, and incentive regime.

In most cases, technology companies face a dilemma of choosing between STP/ITP and STZ regimes, each offering different incentives. Exceptions exist where STPs/ITPs and STZs are co-located, but the lack of a harmonized framework creates ambiguity and unequal competition. There is a strategic need to study and harmonize these models to create a level playing field and reduce risks of constraining further development.

4.1.2 Objectives

- Comprehensively study all models for hosting technology companies (STPs, ITPs, STZs, and other regimes) in Pakistan.
- Review relevant laws, rules, regulations, and implementation realities.
- Recommend improvements to the 'destination offering' to IT & ITeS companies of all sizes.
- Develop a harmonized framework applicable across STPs, ITPs, and STZs
- Develop a unified, size-neutral incentive and facilitation matrix (from startups to large and multinational firms) and a single-window mechanism across STZA, STPs and ITPs.
- How to strengthen the overall 'destination offering' — including plug-and-play facilities, reliable connectivity and single-window facilitation — and assess the suitability of zones/parks to attract high-value, long-term captive and enterprise technology investment as part of that offering.
- Provide a fair transition pathway so that existing tenants of STPs, ITPs and STZs are not disadvantaged by harmonisation.

4.1.3 Terms of Reference (TORs)

- Review and comparative analysis of exemptions and incentives extended to organizations in STPs, ITPs, and STZs.
- Analyze the incentive regimes, governance structures, and physical infrastructure standards across all park types.
- Prepare recommendations to create an enabling environment and level playing field for STZA, STPs, and ITPs.
- Prepare a Harmonized Framework applicable for STPs, ITPs, and STZs.
- Collect baseline data on tenants, incentives actually availed, occupancy and export contribution across STPs, ITPs and STZs, and estimate the cost of the current fragmentation to firms and to investment.
- Model the fiscal impact of the harmonised regime (revenue implications versus export, investment and employment gains) to support decision-making by finance and revenue authorities.
- Define the legal and governance pathway — from a non-regulatory framework (MoU/SOP) to any required notifications or amendments or approved policies — and propose a standing inter-agency coordination mechanism to keep the regimes aligned over time.

4.1.4 High-Level Tasks

- Conduct in-depth comparative analysis of existing STP/ITP/STZ models.
- Generate solutions considering legal, fiscal, and operational impacts.
- Conduct structured stakeholder consultations with government, industry, and academia.
- Draft a comprehensive harmonization policy (non-regulatory framework).
- Consult, refine, and finalize the harmonized policy framework.
- Develop communication and dissemination strategy for the adopted policy.
- Recommend and outline a grants/support process leveraging existing practices.

4.2 Sub-Component B: Consultancy/Study for Ease of Doing Business - Legislation & Judiciary, Tax Reforms, Banking Reforms, IP Rights for Local & International Companies.

4.2.1 Background and Rationale

Pakistan's IT/ITeS industry faces significant legal and regulatory challenges that constrain its growth. Inconsistencies in IP law application, delayed data protection legislation, complex company setup processes for foreign shareholders, banking restrictions on foreign commercial transactions, and limited awareness of applicable legal frameworks among the judiciary collectively impede the sector's competitiveness.

This study addresses these structural legal and regulatory barriers through a comprehensive multi-pronged study covering ease of doing business reforms across four key domains: Legislation & Judiciary, Tax Reforms, Banking Reforms, and IP Rights.

4.2.2 Objectives

- Streamline legal and regulatory processes to reduce bureaucratic barriers for IT companies.
- Address inconsistencies in IP law application across provinces and tribunals.

- Finalize recommendations for Pakistan's Personal Data Protection Legislation.
- Simplify company setup processes for companies with foreign directors or shareholders.
- Propose banking reforms to ease foreign commercial transactions for IT companies.
- Prepare capacity building material for the judiciary on IP law, data protection, and related statutes in consultation with judicial training institute.
- Establish a baseline diagnostic/scorecard of the ease of doing business for IT/ITeS firms (time, cost and steps to incorporate, bank, repatriate export earnings, protect IP and resolve disputes), with targets for each Now/Next/Beyond horizon.
- Secure fiscal predictability for IT/ITeS exports — a stable, multi-year tax framework with a minimum notice period before any material change — and reconcile tax treatment across the FBR, STZA and STP/ITP regimes so firms are not disadvantaged by overlapping regimes.

4.2.3 Key Focus Areas

A. Intellectual Property (IP) Law

- Address inconsistencies in application of IP law across provinces and tribunals.
- Align legal precedents with the current IP framework under the Intellectual Property Organization (IPO) of Pakistan.
- Recommend legislative amendments to strengthen IP protection for local and international IT companies.

B. Data Protection Legislation

- Finalize and recommend enactment of Pakistan's Personal Data Protection Legislation (in draft since 2016).
- Benchmark with GDPR and comparable international frameworks.
- Recommend implementation mechanisms and institutional frameworks for data protection enforcement.

C. Foreign Investment and Company Setup

- Simplify setup processes for companies with foreign directors or shareholders.
- Ease rules related to foreign commercial transactions that currently constrain IT sector operations.
- Recommend SECP/SBP regulatory reforms to facilitate IT sector-specific foreign investment.

D. Training and Capacity Building

- Prepare and deliver training on existing IP law, data protection legislation, and other relevant statutes for the judiciary, senior judicial officers, tribunal presiding officers, and IPO management and administrative staff.

4.2.4 Terms of Reference (TORs)

- Conduct a comprehensive diagnostic of legal and regulatory barriers in the IT/ITeS sector.
- Review legislative framework covering IP laws, data protection, company law, banking regulations, and tax policies.
- Develop actionable recommendations for each focus area.
- Prepare implementation-ready draft legislative/regulatory amendments where applicable.
- Conduct stakeholder consultations with SECP, SBP, FBR, IPO, Bar Councils, and IT industry associations.

- Design and deliver judiciary capacity buildings on IP law and data protection.
- Produce a prioritised, sequenced reform register that distinguishes administrative quick-wins (circulars/notifications within existing authority) from measures requiring legislative or regulatory amendment, each with owner, instrument and horizon.
- Prepare draft instruments where applicable — for example banking/foreign-currency circular(s) for IT/ITeS firms and freelancers, company-setup simplification for foreign directors/shareholders, tax-certainty notification(s), IP-law amendment notes, and enactment-ready data-protection provisions benchmarked to leading international frameworks.
- Assess and strengthen IP enforcement capacity — including the technical, investigative and operational capacity of IPO-Pakistan and the IP tribunals — alongside the judiciary/IPO capacity-building programme.

4.2.5 High-Level Tasks

- Conduct a diagnostic study of the legal/regulatory landscape for the IT/ITeS sector.
- Benchmark with ease of doing business frameworks in comparable economies.
- Generate solutions considering legal, fiscal, and operational impacts.
- Conduct multi-stakeholder consultation process.
- Draft comprehensive policy and legislative recommendations.
- Design and deliver judiciary/IPO training programs.
- Consult and refine policy recommendations.
- Communicate and disseminate final recommendations.

4.2.6 Key Deliverables Component 1: (Sub-Component A and B)

S.No	Deliverable No.	Deliverable Description (Sub-Component A)
1	Deliverable 1	Inception Report & Work Plan — including stakeholder identification, needs assessment and engagement plan.
2	Deliverable 2	Situational Analysis & Comparative Study Report — including baseline data and the fiscal-impact model.
3	Deliverable 3	Stakeholder Consultation Report
4	Deliverable 4	Draft Harmonized Framework & Policy Recommendations
5	Deliverable 5	Final Report with Implementation Roadmap — incorporating the actionable Now/Next/Beyond implementation plan (interventions, responsible owners, timeframes).

S.No	Deliverable No.	Deliverable Description (Sub-Component A)
S.No	**Deliverable No.**	**Deliverable Description (Sub-Component B)**
1	Deliverable 1	Inception Report & Work Plan — including stakeholder identification, needs assessment and engagement plan.
2	Deliverable 2	Diagnostic Report on Legal & Regulatory Landscape — including the EoDB baseline scorecard and a prioritised quick-win vs. legislation reform register.
3	Deliverable 3	Stakeholder Consultation Report
4	Deliverable 4	Draft Policy Recommendations & Legislative Amendments
5	Deliverable 5	Judiciary/IPO Training Program Material & Delivery Report
6	Deliverable 6	Final Comprehensive Report with Implementation Roadmap — incorporating the actionable Now/Next/Beyond implementation plan (interventions, responsible owners, timeframes).

COMPONENT 2:

STUDY FOR DEVELOPING IT-SPECIFIC INSURANCE POLICIES, PROCESSES & SOLUTIONS

CAPITAL MARKET ENGAGEMENT PROMOTIONAL POLICY

Component 2 comprises two closely related sub-components to be undertaken as a single integrated assignment by firm/consortium, with coordinated stakeholder consultations and a unified programme of work.

4.3 Sub-Component A: Study for Developing IT-Specific Insurance Policies, Processes & Solutions

4.3.1 Background and Rationale

Pakistan's IT sector lacks tailored insurance products suited to the unique risk profiles of IT professionals and IT businesses. Existing insurance offerings do not adequately address the needs of freelancers, software houses, BPO companies, and IT SMEs. There is a significant gap in awareness about professional indemnity, cyber liability, and business continuity insurance products.

The intervention aims to create tailored insurance solutions through a comprehensive study that recommends and frames policies and partnerships for launching insurance packages specifically designed for the IT sector, including health insurance, life insurance, group insurance, retirement plans, family insurance, IT business insurance, professional indemnity insurance, and cyber insurance.

4.3.2 Objectives

- Analyze the current availability and adequacy of insurance products for IT businesses and professionals.
- Identify existing gaps and review insurance plans under existing agreements (e.g., PSEB MoU with State Life Insurance Corporation).
- Develop recommendations for new insurance plan schemes for the IT sector.
- Develop guideline assessment tools and financial models to enable insurance companies to implement the recommendations.
- Prepare a plan for attracting international insurance and re-insurance companies to expand offerings in Pakistan's IT sector.
- Design a risk-pool and micro-insurance model suited to freelancers, gig and remote workers — voluntary, digitally distributed and low-ticket.
- Define the regulatory and reinsurance pathway for the recommended products, including digital distribution (for example through PSEB registration and freelancer platforms) and measures to attract international insurers and re-insurers.

4.3.3 Terms of Reference (TORs)

- Analyze the current situation for availability of insurance products for IT businesses and professionals and identify critical issues.
- Review existing insurance plans provided to freelancers, BPOs, and IT companies under the PSEB MoU.

- Develop recommendations for affordable insurance plan schemes for the IT sector (both professionals and businesses).
- Develop guideline assessment tools and financial model(s) to enable insurance companies to assess and implement the recommendations.
- Prepare a plan for attracting international insurance/re-insurance companies to do/expand business in Pakistan's IT sector.

4.3.4 High-Level Tasks

- Generate evidence-based solutions considering actuarial, regulatory, and market impacts.
- Conduct structured consultations with SECP, State Life, private insurers, and IT sector associations.
- Draft comprehensive policy recommendations (non-regulatory framework).
- Consult and refine the policy with relevant stakeholders.
- Develop an implementation and communication strategy.
- Design and recommend an insurance application process leveraging existing practices.

4.4 Sub-Component B: Capital Market Engagement Promotional Policy

4.4.1 Background and Rationale

Pakistan's IT/ITeS sector currently attracts a modest level of domestic capital market investment compared to international benchmarks. The number of deals and the quantum of investment from asset management companies (AMCs), investment advisors, and private financial institutions remains limited. Startups and SMEs in second and third-tier cities particularly lack access to structured capital market financing.

The Capital Market Engagement Promotional Policy is designed to stimulate investment in Pakistan's IT sector by creating incentive frameworks, developing protection mechanisms for investors, and attracting international investment funds to the IT sector.

4.4.2 Objectives

- Assess the current investment environment and capital market landscape in relation to the domestic IT/ITeS sector.
- Develop recommendations for improving capital market access for IT/ITeS companies.
- Design policy incentives such as income/capital gains tax exemptions and government subsidies on initial investment costs.
- Develop investor protection mechanisms and frameworks.
- Prepare a plan to attract international investment funds to Pakistan's IT sector.
- Map the financing gap across the firm lifecycle (idea, seed, early, growth and listing) and target the affordable-capital constraint identified as a leading limiter of the sector's growth.
- Review and recommend a menu of instruments rather than a single measure — for example: neutral/pass-through tax treatment and a fit-for-purpose licensing category for venture capital and alternative investment funds; a fund-of-funds and a time-bound co-investment window; equity-free early-stage grants and enabling frameworks for crowdfunding and angel investment, including diaspora participation.

- Recommend investor-protection standards (disclosure, valuation, minority-investor and exit protections) and a predictable foreign-exchange/repatriation framework for domestic and foreign investors in the IT/ITeS sector.
- Recommend measures to improve access to bank and debt financing for IT/ITeS firms — particularly SMEs and startups that lack physical collateral — including options such as cash-flow- and receivables-based lending, credit-guarantee schemes, venture debt, and export-refinance facilities, developed with the State Bank and the banking sector; and prepare the draft framework or guidelines required.

4.4.3 Terms of Reference (TORs)

- Review existing capital market and investment environment in relation to the domestic IT/ITeS sector.
- Develop recommendations and draft policy for the promotion and expansion of capital market and investment funds accessibility to the IT/ITeS sector.
- Develop recommendations for implementing protection mechanisms for investments/investors in the IT/ITeS sector.
- Prepare a plan for attracting international investment funds to do business in Pakistan's IT sector.

4.4.4 High-Level Tasks

- Conduct a comprehensive analysis of the current capital market landscape for Pakistan's IT sector.
- Benchmark against regional and global capital market engagement models for IT sectors (e.g., India, Vietnam, Bangladesh).
- Develop a draft promotional policy with specific incentive and protection mechanisms.
- Conduct stakeholder consultations with SECP, PSX, SBP, AMCs, venture capital firms, and IT companies.
- Refine and finalize the policy based on stakeholder feedback.
- Develop an investor outreach and attraction strategy targeting international investment funds.

4.4.5 Key Deliverables Component 2: (Sub-Component A and B)

S.No	Deliverable No.	Deliverable Description (Sub-Component A)
1	Deliverable 1	Inception Report & Work Plan — including stakeholder identification, needs assessment and engagement plan.
2	Deliverable 2	Situational Analysis Report (Insurance Landscape)
3	Deliverable 3	Stakeholder Consultation & Gap Analysis Report
4	Deliverable 4	Draft Insurance Policy Schemes & Financial Models — including the actuarial data-needs assessment (linked to Component 3) and a freelancer/gig risk-pool model.

S.No	Deliverable No.	Deliverable Description (Sub-Component A)
5	Deliverable 5	Final Report with Implementation Plan — incorporating the actionable Now/Next/Beyond implementation plan (interventions, responsible owners, timeframes).
S.No	**Deliverable No.**	**Deliverable Description (Sub-Component B)**
1	Deliverable 1	Inception Report & Work Plan — including stakeholder identification, needs assessment and engagement plan.
2	Deliverable 2	Capital Market Landscape & Benchmarking Report
3	Deliverable 3	Stakeholder Consultation Report
4	Deliverable 4	Draft Promotional Policy with Incentive Framework — including the instrument menu and investor-protection standards.
5	Deliverable 5	Final Policy Report with International Investor Attraction Plan — incorporating the actionable Now/Next/Beyond implementation plan (interventions, responsible owners, timeframes).

COMPONENT 3:

DEVELOPMENT OF ONLINE NATIONAL IT INDUSTRY DATABASE WITH IT INDUSTRY CENSUS

4.5 Background and Rationale

Under the flagship project **'Revamping the IT Industry Landscape'**, the Pakistan Software Export Board (PSEB), Ministry of IT & Telecom (MoITT), aims to establish a **credible, verifiable, and comprehensive national-level digital database** of Pakistan's IT and ITeS industry.

Currently, Pakistan lacks:

a. A comprehensive and centralized repository of information on the **IT/ITeS companies** (segregation as product-based and services-based)
b. A verifiable record of **IT professionals, freelancers, gig workers, and remote workers**
c. A standardized classification of workforce skills, technology domains, and company specializations
d. A central dataset to support evidence-based policy, strategic planning, and investment promotion

4.5.1 Objectives of the Census

The primary objective of this initiative is to establish a comprehensive, centralized, and verified National IT Industry Database, supported by a detailed nationwide census of Pakistan's IT and IT-enabled Services (ITeS) sector. The database will serve as a single source of truth for government, industry, and other stakeholders to enable data-driven decision-making, ecosystem development, and strategic planning, in line with the objectives of the PC-I "Revamping IT Industry Landscape".

Specifically, the initiative aims to:

1. **Develop a verified national repository** of IT/ITeS companies and IT professionals, including freelancers, gig workers, and remote workers, capturing workforce size, skills, technology domains, and employment structures.
2. **Generate reliable revenue and business indicators**, including domestic and export earnings, segmented by product-based and services-based business models.
3. **Ensure data sanity, standardization, and scalability**, allowing the database to be continuously expanded and enriched over time to meet the evolving needs of Pakistan's IT ecosystem and readily availability to the stakeholders.
4. **Enable skills development and workforce planning** by profiling IT professionals, trainees, and certification holders, and identifying current and emerging skill demands across technology domains.

5. **Strengthen government–industry linkages** by providing structured data to support public sector demand for IT products and services and facilitate coordination between government entities and the IT industry.
6. **Support ecosystem planning and monitoring** by mapping IT parks, digital infrastructure, legislative progress, investment trends, and other key ecosystem measures affecting the IT sector.

This initiative will provide a robust, secure, and scalable data platform to support informed decision-making, enhance sector visibility, and accelerate the sustainable growth of Pakistan's IT industry.

4.5.2 Definitions of the IT Firms & Professionals

4.5.2.1 IT Professionals

IT Professionals include all individuals, whether full-time, part-time, contractual, freelance, remote, gig-based, or self-employed, engaged in the development, deployment, maintenance, management, support, or delivery of IT and IT-enabled services.

These include employed IT staff, freelancers, remote workers, gig workers, startup founders, and technical interns working in software engineering, data & AI, cloud, cybersecurity, digital design, infrastructure, ITeS operations, and related technology roles.

A descriptive breakdown of the IT professionals is given below:

4.5.2.2 Employed IT Professionals (On-Site / In-Office)

Individuals formally employed by an IT/ITeS firm or any other organization in roles involving technology development, management, or support.

4.5.2.3 IT Freelancers (Independent Individuals)

An independent IT professional offering services to multiple local or international clients on a project/contract basis, typically via freelancing platforms, without an employer–employee relationship. Key characteristics of such individuals include:

- Operate independently or via freelancing platforms (Upwork, Fiverr, etc.)
- May serve domestic or international clients
- Offer project-based, hourly, or contractual IT services
- May be registered as sole proprietors or operate informally

4.5.2.4 Remote IT Workers (Foreign or Domestic Employers)

A professional working for a domestic or foreign employer, while residing in Pakistan, regardless of employment contract type (employee, consultant, contractor, or gig worker). Key characteristics of such individuals include:

- Permanent remote employees
- Contractual remote professionals
- Consultants providing long-term dedicated services
- "Work-from-Pakistan" foreign employees

Key **distinction:** They are tied to a single employer (unlike freelancers).

4.5.2.5 Gig IT Workers (Short-term / Task-based IT Professionals)

Project-based or micro-task workers providing services intermittently or through on-demand digital platforms. Some examples of such individuals include:

- Task-based coders
- Digital content creators
- QA testers performing crowd-testing
- Logo designers, editors, and micro-task AI training workers

Gig workers may at times overlap with freelancers, but are majorly characterized by:

- Short-duration engagements
- Platform-mediated work (crowdsourcing platforms)
- Task-based earnings rather than long-term gigs

4.5.2.6 Self-employed Tech Entrepreneurs / Startup Founders

Individuals who have founded or co-founded tech start-ups, actively develop or manage technology products/services, and may or may not draw a salary.

They are included as IT professionals due to their functional technology roles.

4.5.3 IT/ITeS Firms

IT/ITeS Firms refer to all business entities, registered or unregistered, engaged in the development, delivery, or support of information technology (IT) or IT-enabled services (ITeS). These firms operate within Pakistan and may serve domestic or international markets. For this census, IT/ITeS firms include, but are not limited to:

4.5.3.1 IT Services Companies

Firms primarily engaged in providing technology-based services such as:

- Software development, customization, and maintenance
- Web/mobile application development
- Cloud services, DevOps, system integration
- Cybersecurity services
- IT consulting and support services
- Managed services / NOC / SOC operations

4.5.3.2 IT Products & Platform Companies

Companies developing and commercializing proprietary technology products or platforms, including:

- SaaS, PaaS, and enterprise software products
- AI/ML models and solutions
- FinTech, HealthTech, AgriTech, EdTech products
- Product-based startups and innovation-driven enterprises

4.5.3.3 IT-enabled Services (ITeS) Firms

Firms delivering technology-supported business services, such as:

- Business Process Outsourcing (BPO)
- Shared service centers (SSC)
- Call centers and contact centers
- KPO, digital marketing, animation & creative services
- Data processing, back-office, HR/finance outsourcing

4.5.3.4 Hybrid Firms

Entities offering a mix of IT services, IT products, and ITeS functions under a single business model.

Scope Applicability: For inclusion in the national census, an IT/ITeS firm must be actively operational at the time of the survey, either formally registered with SECP, FBR, provincial authorities, or operating informally (freelance collectives, small studios, tech startups in early stages).

4.5.4 Scope of Work (SOW)

The Firm will lead the census activities and data development work. PSEB will provide domain inputs, industry coordination, and strategic oversight. The scope includes:

4.5.4.1 Census Framework & Instrument Design

The firm will design the census framework, including:

- Classification of IT/ITeS companies (product, services, BPO, platform)
- Workforce taxonomy: technology domains, specialization categories, job levels
- Employment type segmentation
- Location-based mapping (city, district, province)
- Company capabilities, functions, export orientation

4.5.4.2 Questionnaire Development & Digital Tools

The firm will develop:

- Standardized company-level and professional-level questionnaires
- Digital data collection tools (CAPI, tablets, online forms)
- Data validation codes, classification structures, and consistency checks

4.5.4.3 Nationwide Data Collection

The Firm shall execute nationwide data collection through an appropriate field enumeration network and digital data collection mechanisms, in accordance with the census methodology and coverage framework approved by PSEB. Activities shall include:

- Nationwide coverage across all provinces and territories, covering identified IT/ITeS clusters, cities, districts, and other relevant geographic locations;
- Enumeration of PSEB-registered, SECP-registered, other formally registered, and identified unregistered IT/ITeS entities;

- Mapping and coverage of IT parks, technology parks, co-working spaces, incubation centers, and emerging technology hubs;
- Appropriate digital outreach and data collection mechanisms for freelancers, gig workers, and remote IT professionals;
- Geo-tagging, time-stamping, and other appropriate verification mechanisms for field responses, where applicable;
- Implementation of field-level quality assurance, supervision, back-checking, and response validation mechanisms to ensure completeness, accuracy, and reliability of census data.

4.5.4.4 Data Verification & Validation

The firm will perform multi-level verification subject to availability, applicable laws and approved data-sharing arrangements

- Administrative records (SECP, PTA, FBR, NADRA, PSEB, Ignite)
- Industry association data (P@SHA, PAFLA)
- Cross-checking of company and freelancer records
- Internal consistency and statistical validation

4.5.4.5 Data Processing, Cleaning & Coding

The firm will:

- Clean, standardize, and classify data according to mutually agreed taxonomies
- Remove duplication and ensure statistical consistency
- Apply confidentiality protocols and national data standards

4.5.4.6 Digital Database Development

PSEB will provide the required infrastructure, hosting environment, domain, and other necessary technical resources for development of the National IT Industry Database. The selected firm shall work in close coordination with PSEB to support the development and population of the database and shall provide verified, cleaned, classified, and structured census data in agreed machine-readable formats.

The database and datasets shall support:

- Standard machine-readable formats, including CSV, SQL dumps, and API-compatible schemas;
- Integration with existing and future PSEB systems;
- Scalability to facilitate periodic updates and addition of new census data;
- Categorization and analysis by technology domain, skill level, company vertical, geography, and other agreed classifications;
- Appropriate data dictionaries, metadata, classification structures, and documentation to facilitate data integration and future updates.

4.5.4.7 Reporting & Outputs

The firm will produce:

- Summary Statistical Report
- Detailed Census Report
- Sector and Skills Mapping Report
- City-level IT cluster analysis
- Technology domain distribution reports

PSEB may request additional cross-tabulations for policy planning.

4.5.5 Expected Outcomes and Key Deliverables

Development of a centralized, verified, authoritative, national digital database of all IT/ITeS companies and IT professionals, that will be:

- Accessible to various stakeholders and sectors, including government agencies, IT companies, and educational institutions, to guide sector strategies, track industry performance, and support decision-making.
- Support initiatives of Government-Industry linkage projects and opportunities, facilitating public sector demand for tech products and services, through reliable data.

Generation of analytical/research reports, mapping outputs, verified datasets, and correlation with secondary datasets for enhanced actionable recommendations.

- Workforce classification across technology domains, specializations, job roles, geographic regions (cities), and demographics.
- Mapping of product-based companies across emerging technology sectors.
- Standardized and digitized repository for Workforce planning, Export promotion, Academia–industry collaboration, Investment strategy, etc.

A sustainable update mechanism to ensure the national database is periodically enriched and expanded, maintaining its relevance as the technology landscape matures.

S. No.	Deliverable Description
1	Inception Report, Sample Design & Census Work Plan — including stakeholder identification and engagement plan. *(Ref: feedback F2.)*
2	Final Census Instruments & Data Collection Framework
3	Pilot Census & Finalized Methodology
4	Nationwide Census / Field Operations Completion
5	Data Cleaning, Validation & Final Master Dataset
6	Data Analysis & Draft Census Report
7	Final IT Industry Census Report, Dataset & Database Outputs

ACRONYMS / ABBREVIATIONS

Sr.NO	Acronym	Description
1	MoITT	Ministry of Information Technology & Telecommunication
2	PSEB	Pakistan Software Export Board
3	EOI	Expression of Interest
4	IT	Information Technology
5	ITeS	Information Technology Enabled Services
6	PC-1 / PC-I	Planning Commission Form-I
7	EPADS	E-Pak Acquisition & Disposal System
8	PPRA	Public Procurement Regulatory Authority
9	JV	Joint Venture
10	STZA	Special Technology Zones Authority
11	STZs	Special Technology Zones
12	STP	Software Technology Park
13	ITP	Information Technology Park
14	TORs	Terms of Reference
15	PMO	Project Management Office
16	IP	Intellectual Property
17	IPO	Intellectual Property Organization
18	FBR	Federal Board of Revenue
19	SECP	Securities and Exchange Commission of Pakistan
20	SBP	State Bank of Pakistan
21	GDPR	General Data Protection Regulation
22	BPO	Business Process Outsourcing
23	SME	Small and Medium Enterprise
24	AMC	Asset Management Company
25	PSX	Pakistan Stock Exchange
26	CAPI	Computer-Assisted Personal Interviewing
27	CSV	Comma-Separated Values
28	SQL	Structured Query Language
29	API	Application Programming Interface
30	NOC	Network Operations Center
31	SOC	Security Operations Center
32	SaaS	Software as a Service
33	PaaS	Platform as a Service
34	AI	Artificial Intelligence
35	ML	Machine Learning
36	FinTech	Financial Technology
37	HealthTech	Health Technology
38	AgriTech	Agricultural Technology
39	EdTech	Education Technology
40	KPO	Knowledge Process Outsourcing