



**PROJECT IMPLEMENTATION UNIT (PIU)
PUNJAB URBAN LAND SYSTEM
ENHANCEMENT (PULSE)
Punjab Land Records Authority (PLRA)
Government of the Punjab



TERMS OF REFERENCE

PUNJAB URBAN LAND SYSTEM ENHANCEMENT (PULSE)

**ISLAMIC REPUBLIC OF PAKISTAN
PUNJAB PROVINCE**

**HIRING OF IT SECURITY EXPERT
FOR PROFESSIONAL SUPPORT**

November 2024

Terms for Reference for IT Security Expert for Professional Support

1. BACKGROUND INFORMATION

Board of Revenue, Punjab with the technical & financial support of World Bank is implementing the Punjab Urban Land System Enhancement (PULSE) project for the establishment of a unified central database of all types of urban properties (societies / authorities / development agencies), rights and charges. The proposed system will not merely a GIS & Parcel based one but has all possible functionalities to serve as a robust platform for creation of 'Spatial Data Infrastructure' (SDI), an inevitable need of the future. The project will provide a complete and transparent record of title in land and immovable property. Digitization of remaining parts of rural land, digitization of katchi abadi record, automation of sub-registrar record rooms is also part of the project.

1.1. Beneficiary Country and Province:

Islamic Republic of Pakistan and Punjab Province.

1.2. Contracting Authority:

Under the PULSE Project and in agreement with the World Bank, the Project Implementation Unit (PIU), Punjab Land Records Authority (PLRA), Government of Punjab is the contracting authority.

2. OBEJECTIVE

One of the core objectives of the PIU is to provide analytical services and value-added information and solutions to PLRA and other users such as project beneficiaries, project stakeholders, and donor organizations in a manner that broadens and strengthens the digitization of land records in Punjab and maximizes the effectiveness of the PULSE.

The IT Security Expert for professional support will provide professional support to the PULSE and wider PIU team that is part of achieving the project development objective of PULSE, aligning with the vision of PLRA to integrate and automate land records management.

3. SCOPE OF WORK

The key responsibilities & duties to be accomplished by the IT Security Expert are as follows:

- i. Monitor and respond to security incidents and alarms within the data center environment.
- ii. Work closely on security aspects of multiple technologies and methodologies as it relates to operating systems, databases, access controls, patch management, encryption, anti-virus, and vulnerability assessments etc. to assist the Engineering and Compliance team with effective research, data gathering, analysis, metrics, reporting and communications.
- iii. Identify security prospects of multiple solutions that help keep the networks from threats, including firewalls, intrusion detection systems (IDS), and virtual private networks (VPNs)
- iv. Hands-on Experience on the Firewall devices (Like, cisco, Fortinet, Palo Alto etc).
- v. Proactive monitoring of Firewalls/IPS and critical security components to assure the service availability & detecting/identifying potential security threats.
- vi. Conduct regular inspections to identify potential security vulnerabilities and ensure compliance with security policies and procedures.
- vii. Assist in configuring and maintaining network security devices, including firewalls, intrusion detection/prevention systems, and virtual private networks (VPNs).
- viii. Monitor network traffic for anomalies and potential security breaches, and take appropriate actions to mitigate risks.
- ix. Monitor for attacks, intrusions and unusual, unauthorized or illegal activities.
- x. Implement and maintain network segmentation and isolation to minimize the impact of security incidents.
- xi. Test and evaluate security products.
- xii. Design new security systems or upgrade existing ones.
- xiii. Use advanced analytic tools to determine emerging threat patterns and vulnerabilities.
- xiv. Engage in 'ethical hacking', for example, simulating security breaches.
- xv. Identify potential weaknesses and implement measures, such as firewalls and Encryption.
- xvi. Document and report security incidents to the appropriate authorities.
- xvii. Contribute to disaster recovery planning and testing to ensure business continuity in the event of system disruptions.
- xviii. Audit, Security and Regulatory compliance knowledge.
- xix. Hands-on experience in Security Operations and Incident Management.

4. QUALIFICATION AND EXPERIENCE

Applicants shall have the following qualifications and experience:

- i. Minimum 16 years of education in Computer Science / Information Systems / Information Technology/Computer Engineering from HEC recognized University / Institute.
- ii. At least 3 years of relevant experience in handling security of large networks.
- iii. Certification CCNA / CCNP (Security) or Equivalent Trainings.

5. TYPE OF CONTRACT

Time-Based Contract.

6. ESTIMATED DURATION OF CONTRACT

The duration of the contract is for a period of two (02) years, extendable subject to satisfactory performance evaluation of the Consultant.

7. SELECTION METHOD

The selection will be made in accordance with the Open Competitive Selection of Individual Consultants of World Bank Procurement Regulations for IPF Borrowers”, dated November 2020. The attention of interested Consultants is drawn to Section III, paragraphs, 3.14, 3.16, and 3.17 of the World Bank’s “Procurement Regulations for IPF Borrowers” dated July 2016 revised November 2017 and August 2018 (“Procurement Regulations”), setting forth the World Bank’s policy on conflict of interest.
