

TECHNICAL SPECIFICATIONS & SCHEDULE OF REQUIREMENTS

1. Background and Introduction

The National Institute of Banking and Finance (NIBAF), operating under the State Bank of Pakistan, has developed the POMPAK Portal — a large-scale digital learning and gaming platform built on the Laravel framework with a JavaScript-based gaming engine. The platform includes:

- Multi-language / multilingual learning modules
- Interactive educational games and gaming activities
- Video-based learning materials
- Approximately 50GB of multimedia educational content
- Expected user base of more than 50,000 users across Pakistan

In addition, NIBAF operates a Learning Management System (LMS) that requires a reliable, scalable, and secure production hosting environment. The combined POMPAK Portal and NIBAF LMS constitute the scope of the hosting services to be procured under this RFP.

2. Scope of Work

The selected vendor shall provide a fully managed, dedicated VPS hosting server solution for the production deployment of the POMPAK Project and NIBAF LMS. The scope includes:

- Provision of a dedicated VPS server meeting or exceeding the minimum technical specifications
- Complete server setup, configuration, and commissioning
- Installation and configuration of all required software, control panels, web servers, databases, and caching systems
- Implementation of security measures including firewall, antivirus (Imunify360), SSL encryption
- Automated daily backup system with off-site storage
- 24/7 server monitoring and managed support throughout the contract period
- Server migration support for existing NIBAF applications
- Monthly performance and uptime reports
- Data residency within Pakistan (mandatory)

3. Minimum Technical Specifications

The Bidder's proposed server must meet or exceed the following minimum specifications:

Component	Minimum Specification Required	Bidder's Offered Specification
Server Type	Dedicated VPS (Virtual Private Server) minimum Dual Physical Gold processor	[Bidder to fill]
CPU	32 vCPU (Minimum)	[Bidder to fill]
RAM	64 GB (Minimum)	[Bidder to fill]
Storage	2x2 TB NVMe SSD (Minimum)	[Bidder to fill]
Network Bandwidth	1 Gbps Dedicated Port (Minimum)	[Bidder to fill]
Operating System	AlmaLinux 9 / Ubuntu 22.04 LTS or equivalent	[Bidder to fill]

Web Server	LiteSpeed Web Server (Licensed)	[Bidder to fill]
Control Panel	cPanel (Licensed)	[Bidder to fill]
Database	MySQL + SQL Server (Enterprise Licensed Edition)	[Bidder to fill]
Caching	Redis Cache	[Bidder to fill]
Security Software	Imunify360 (Licensed) or equivalent enterprise antivirus	[Bidder to fill]
Firewall	Hardware/Software Firewall with Intrusion Detection	[Bidder to fill]
SSL Certificate	Wildcard SSL Certificate (2048-bit minimum encryption)	[Bidder to fill]
Backup	Automated daily backup with minimum 30-day retention	[Bidder to fill]
Uptime SLA	99.9% guaranteed uptime	[Bidder to fill]
Data Center Location	Within Pakistan (Mandatory)	[Bidder to fill]
Support	24/7 Fully Managed Technical Support	[Bidder to fill]
Monitoring	24/7 Server Monitoring & Alerting	[Bidder to fill]
Dedicated IP	Minimum 1 Dedicated IP Address	[Bidder to fill]

Note: Bidders offering specifications exceeding the minimum shall be awarded additional points under the Technical Evaluation Criteria.

4. Software & Application Requirements

The server environment must fully support the following application stack:

- Laravel PHP Framework (PHP 8.2+ required)
- JavaScript-based gaming engine (Node.js compatible environment)
- MySQL database server (latest stable version)
- Microsoft SQL Server or compatible ODBC driver
- Redis in-memory cache
- Composer (PHP dependency manager)
- LiteSpeed Web Server with LSCache
- cPanel/WHM control panel

5. Security Requirements

The Vendor shall implement and maintain the following security measures throughout the contract period:

- Imunify360 antivirus and malware protection (or equivalent enterprise-grade solution)
- Hardware/software firewall with intrusion detection and prevention system (IDS/IPS)
- Wildcard SSL certificate with 2048-bit or higher encryption
- DDoS protection (Layer 3, Layer 4, and Layer 7)
- Automated daily vulnerability scans
- Server access logs with 90-day retention
- Two-Factor Authentication (2FA) for all administrative access
- Security patch management within 72 hours of critical patch release

- Monthly security and uptime reports submitted to NIBAF

6. Backup and Disaster Recovery

- Automated daily backup of all server data, databases, and application files
- Minimum backup retention period: 30 days (daily), 3 months (weekly snapshots)
- Backup storage must be on a separate physical server or location
- Backup restoration must be completed within four (04) hours of request
- No additional charges for backup restoration during the contract period

7. Support & Service Level Agreement (SLA)

- 99.9% guaranteed uptime for all hosted services
- 24/7/365 managed technical support through ticketing system and phone
- Critical issue response time: within 1 hour
- Non-critical issue response time: within 4 hours
- Scheduled maintenance to be performed during off-peak hours with minimum 48 hours advance notice
- Monthly SLA compliance reports to be submitted to NIBAF
- SLA agreement to be signed with the selected vendor within 7 days of contract award

8. Migration and Transition Support

The vendor shall provide complete migration support including:

- Migration of existing NIBAF LMS and POMPAK portal data to the new server
- Configuration and testing of all applications post-migration
- Minimum 30-day parallel operation period upon contract expiry or termination
- Complete data handover, credentials transfer, and knowledge transfer at contract end
- No additional charges for migration or transition services

9. Implementation Schedule

#	Activity	Timeline from Award	Liquidated Damages Milestone	Location
1	Server Provisioning, Setup, Configuration & Software Installation	Within 07 Days	Yes	NIBAF / Data Center
2	Security Implementation & SSL Installation	Within 10 Days	Yes	NIBAF / Data Center
3	Application Migration (POMPAK / LMS)	Within 14 Days	Yes	NIBAF / Data Center
4	Testing, UAT & Operational Acceptance	Within 21 Days	Yes	NIBAF Islamabad
5	Go-Live & Commencement of Production Operations	Within 30 Days	Yes	NIBAF / Data Center

