

Technical Specifications

1. Scope of the Project and Requirements:

The National Bank of Pakistan relies on its public-facing and internal digital platforms to deliver services, communicate with stakeholders, and maintain its reputation as a trusted financial institution. With rising cyber threats—particularly Distributed Denial of Service (DDoS) attacks—there is a critical need to ensure high availability, security, performance, and resilience of NBP’s web presence.

This project aims to establish a secure, scalable, and resilient website hosting infrastructure integrated with enterprise-grade DDoS protection to safeguard NBP’s digital assets against service disruption and cyberattacks while ensuring compliance with regulatory and security standards applicable to banking institutions.

The key objectives of this project are:

- Ensure continuous availability of NBP websites and online services.
- Protect digital assets against DDoS attacks, traffic flooding, and malicious threats.
- Improve performance, responsiveness, and scalability of hosted websites.
- Achieve regulatory compliance, security best practices, and audit readiness.
- Provide robust monitoring, alerting, and incident response mechanism.
- Reduce operational risks, downtime, and reputational impact.

1.1. Professional Implementation Services:

Bidder will provide the complete design, deployment, implementation and support of the proposed solution. Bidder should provide "Professional Implementation Services" with proven methodology from its principal for the implementation of the proposed solution.

Bidder is required to submit the following items in accordance with the following requirements:

#	Requirements
1	Proposed Solution Technical Requirements
	Bidder should provide an undertaking (with proper proposal reference and/or remarks against each below mentioned requirements) on legal stamp paper of Rs. 100 in order to ensure that proposed solution would cater to the underlying requirements:
2	Website Hosting and DDos Mitigation Services
(a)	Bidder should provide web hosting services for NBP existing website (*.nbp.com.pk) Infra must have at least inline protection of 100+ Gbps on server and unlimited subdomains.
(b)	Bidder should provide services for transfer/migration of NBP existing website to host on the new location. (Undertaking on letterhead must be provided with proper reference (page No) in the proposal)
(c)	Bidder should provide website hosting services considering the following platform / technologies (included but not limited to) being used for NBP existing website : • ASP.NET Framework 4.0 or latest • (SQL Server Enterprise 2016/2017 or latest) • Internet Information Services 7.0 or Latest • Windows Server 2019 or Latest • RedHat Linux Latest version Note: Bidder may propose upgraded platform/technologies. However, it will be bidder's responsibility to ensure compatibility with NBP existing website.

(d)	Bidder should provide web hosting services on dedicated server with following minimum configurations: • Hardware (2 x 3.4 Ghz Intel Xeon Quad Core equivalent or Higher) • Memory: 64 GB, HDD 4 TB Raid 5, Hardware Firewall & 100+ Gbps port (equivalent or higher) Unlimited Traffic • Website will be secure via SSL & TLS supported • Daily Backup by Bidder • Server administration by bidder and Management by NBP
(e)	Bidder should provide Secure FTP Credentials required to connect to Server through SFTP
(f)	Bidder should provide Secure Remote SQL server connectivity required to connect SQL Server
(g)	Bidder should provide web hosting services on servers located in at-least two different countries (at least one in Pakistan with HA with cold state & auto sync) to cater contingency scenarios. The bidder is required to mention the details of hosted servers' locations. It is bank's discretion to accept the server hosting locations to comply with Government regulation.
(h)	Bidder should provide Cloudflare Enterprise Subscription for NBP domain or equivalent security services, which include DDOS Protection, Web Application Firewall and Content Delivery Network etc. up to 10TB of CDN Traffic, 100 mm HTTP requests. Also provide per TB and per MM cost per month incase of overutilization of said limits.
(i)	Bidder should provide real-time alerts to NBP for any malicious activity detected. Provide details of alerts mechanism/process. Bidder should provide documentary evidence for the same.
(j)	Bidder should provide customer portal to NBP. Bidder should provide documentary evidence for the same.
(k)	Bidder should provide access logs reports on need basis as well along with Monthly Reports
(l)	Bidder should also provide WAF incident/event log and details with monthly reports.
(m)	The portal should be able to provide multi-user access and role-based access for the portal.
(n)	Bidder should provide DNS parking for domain nbp.com.pk
(o)	Bidder should provide helpdesk system/ Support center access to NBP for any issue/complaint for the proposed solution. Provide details of support mechanism.
(p)	Bidder should provide 24 X 7 x 365 x 4 Service Level Agreement (SLA) for support throughout the contract period with 30-minute response time. With 24/7/365 Live Support as well on common medium like WhatsApp etc. for quick updates <i>(Undertaking on letterhead must be provided with proper reference (page No) in the proposal)</i>

(q)	Bidder should provide SLA guaranteed minimum of 99.99% availability per calendar month with penalty clauses & availability reports. <i>(Undertaking on letterhead must be provided with proper reference (page No) in the proposal)</i>
(r)	Bidder must agree to pay penalty as per schedule below in accordance with clause 2.20: - 99.9% or above (no penalty) - 99% to below 97.9% (5% penalty of per month charges) - 97.99% to below 95.99% (10% penalty of per month charges) - below 95.99% (15% penalty of per month charges i-e non-performance) (Per month charges will be calculated by Bid amount/36)
(s)	Bidder must agree to the Exit Clause in the final agreement as per below clause: -If uptime < 95.99% for three consecutive months, NBP reserves the right to terminate the contract without any lien and irrespective of remaining contract period.
(t)	Bidder should have minimum TIA-942 - Rated Tier 3 Compliant Data Centre or equivalent & Network Infrastructure where the site to be hosted. Bidder should provide documentary evidence for the same.
(u)	Bidder should provide Content Delivery Network including: - Static Content Caching - Dynamic Content Caching - Client-side Control - Multi Location - Multi Tier Setup
(v)	Bidder should secure DNS management & availability and provide access to DNS manage entries.
(w)	Bidder should provide Website Hosting Solution & DDoS Mitigation Services with 100+ Gbps protection as per BOQ <i>(Undertaking on letterhead must be provided with proper reference (page No) in the proposal)</i>