

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ



سرکار پنجاب حکومت پاکستان

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| سرکار پنجاب حکومت پاکستان | سرکار پنجاب حکومت پاکستان (SD-WAN) ڈیپارٹمنٹ |
| سرکار پنجاب حکومت پاکستان | PROC-2023-01                                 |
| سرکار پنجاب حکومت پاکستان | (IUL) 164-PRO/1/2023/8                       |
| سرکار پنجاب حکومت پاکستان | 30 جولائی 2023                               |







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| Proposed firewall should have the following interfaces  |
| <ul style="list-style-type: none"> <li>• 4 x 25GE SFP28 interfaces</li> <li>• 4 x 10GE SFP+ interfaces</li> <li>• 16 x 10/100/1000 RJ-45 Copper Interfaces</li> <li>• 8 x 1GE SFP interfaces</li> <li>• 1 x Dedicated RJ-45 MGMT interface</li> </ul> |
| 1 x Dedicated RJ-45 HA interface  |
| Should Come With 4 x 10GE SFP+ Multi-Mode (SR) transceivers (Compatible with The Proposed Appliance)  |
| <b>Performance Requirements</b>   |
| Should support at least 8 million concurrent connections  |
| Should support a minimum of 550,000 new sessions per second processing  |
| Should have following minimum performance based on real-world Traffic Mix: <ul style="list-style-type: none"> <li>• NGFW Throughput - 11 Gbps</li> <li>• IPS Throughput - 14 Gbps</li> <li>• Threat Prevention Throughput - 10 Gbps</li> </ul>        |
| SSL Inspection Throughput - 9 Gbps  |
| <b>Network and Routing Requirements (Should Support the Following)</b>  |
| Should Support Static Routing   |
| Should Support Policy-based Routing   |
| Should Support Dynamic Routing (RIP, OSPF, BGP & IS-IS) for both IPv4 and IPv6  |
| Should Support Multicast Routing  |
| Should Support Net Flow or sFlow  |
| Should Support Application Aware Routing  |
| <b>Additional Network Requirements (Should Support the Following)</b>   |
| Should Operate in standard NAT mode, or transparent mode  |
| Should Support NAT functionality (including PAT)  |
| Should Support Policy-based NAT   |
| Should Support User-Group based Authentication (Identity based firewalling) and Scheduling  |
| Should Support Device based and OS based policies   |
| Should Support IPv6 for both NAT and Transparent Mode   |
| Should Support Creation of up to 10 virtual firewalls on the device itself. (Any required licenses should be included in the proposal.)   |
| <b>Authentication Requirements</b>  |
| Support for authentication at the firewall policy level   |
| Support for external RADIUS, LDAP and TACACS + integration for User and Administrator Authentication  |
| Support for Native Windows Active Directory Integration   |
| Support PKI/Digital Certificate based two-factor Authentication for Administrators  |
| <b>Administration &amp; Management Requirements</b>   |
| Support WebUI (HTTP/HTTPS) and CLI (Telnet/ SSH) based management   |
| Configurable options to define remote access to the firewall on any interface and restrict the same to a specific IP/Subnet (i.e., Trusted Hosts for Management)  |
| Support connecting directly to the firewall through a console connection (RJ45 or DB9)  |
| Should Support SNMPv2c and SNMPv3   |
| Support generating to generate automatic notification of events via mails/syslog  |
| Able to provision to send alerts to multiple email recipients   |
| Support for role-based administration of the device   |
| Concurrent login for multiple Administrators  |
| Customizable Dashboard and Widgets  |
| Provide A Method to export the device rule set and configuration to a text file via Web or TFTP   |
| Support for image upgrade via FTP, TFTP and WebUI   |

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| Support system software rollback to the previous version during upgrade   |
| <b>Encryption &amp; VPN Requirements</b>  |
| Should Consist of integrated VPN that minimally support the following protocols DES, 3DES,MD5,SHA-1, SHA-256, MD5, Diffie-Hellman Group1, Group2,Group 5, IKE v1/2, AES 128/192/256 |
| Support Hub and Spoke VPN topology  |
| IPSec VPN shall support XAuth over RADIUS and RSA SecurID   |
| Should have integrated SSL VPN with no user license slab restriction  |
| Support SSL two-factor authentication with Digital Certificates, or Hardware/Mobile tokens  |
| Support Single Sign-On Bookmarks for SSL Web VPN  |
| Support Windows, Linux and MAC OS for SSL-VPN.  |
| Support NAT within IPsec/SSL VPN tunnels  |
| Support PPTP and L2TP over IPsec VPN protocols  |
| <b>IPS and Application Control Requirements</b>   |
| Should Have built-in Signature and Anomaly based IPS engine on the same appliance   |
| Should Have Means Of mitigation of denial of Service and Buffer Overflow Attacks  |
| Should Have an IPS Certified by an independent certification/testing body such as NSS Labs and ICSA   |
| Should be Able to identify and control applications   |
| Should be Able to control popular IM/P2P, social media, malware, applications regardless of port/protocol   |
| Should be Able to control cloud-based applications and should able to route the specific applications via different WAN links based on the jitter and latency on the link           |
| <b>Gateway Antivirus</b>  |
| Should facilitate embedded gateway antivirus support  |
| Should include anti-spyware and worm prevention   |
| The facilitated antivirus should support real-time detection of viruses and malicious code for HTTP,HTTPS, FTP,SMTP, SMTPS,POP3, IMAP, NNTP and IM                                  |
| Should have configurable policy options to select what traffic that are scanned for viruses   |
| Should have options to prevent user downloads based on file extension as well as file type  |
| Should have support for Flow-Based Antivirus Scanning Mode  |
| Should be capable of scanning Encrypted VPN tunnel traffic originating from the client for virus  |
| Should have the ability of antivirus scanning for IPv6 traffic  |
| Should be able to Integrate with Advanced Threat Prevention solution for zero-day threat mitigation   |
| <b>Web Content Filtering Requirements</b>   |
| Should facilitate embedded web content filtering feature  |
| Web content filtering Should work independently without the need to integrate with an external proxy server   |
| Web content filtering should have the facility to block URLs based on categories  |
| Web content filtering should support HTTP and HTTPS traffic   |
| Should be able to block URLs hosting spywares/adware etc.   |
| Should be able to block different categories/sites based on User Authentication   |
| Should have configurable options to allow/deny access to web sites in case if the URL rating service is unavailable   |
| Should have options to customize the "Blocked Webpage Message" information displayed to end users   |
| Should be able to Integrate with an Advanced Threat Prevention solution to prevent from zero-day threats in unknown web URLs  |
| Should be able to detect DNS-based spoofing attacks   |
| Should be able to assign usage-based and time-based quota for bandwidth web categories  |
| Should include DNS filtering feature to block DNS requests to known botnet C&C domains  |
| Should support category-based DNS filtering   |



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| Should support at least 700,000 concurrent connections  |
| Should support a minimum of 35,000 new sessions per second processing   |
| Should support data throughput of a minimum 5 Gbps  |
| Should have following minimum performance based on real-world Traffic Mix <ul style="list-style-type: none"> <li>• NGFW Throughput - 800 Mbps</li> <li>• IPS Throughput - 1 Gbps</li> <li>• Threat Prevention Throughput - 600 Mbps</li> </ul> SSL Inspection Throughput - 300 Mbps |
| <b>Network &amp; Routing Requirements</b>   |
| Should support Static Routing   |
| Should support Policy-based Routing   |
| Should support Dynamic Routing (RIP, OSPF, BGP & IS-IS) for both IPv4 and IPv6  |
| Should support Multicast Routing  |
| Should support Net Flow or sFlow  |
| Should support Application aware Routing  |
| <b>Features Requirements</b>  |
| Should be able to operate in standard NAT mode, bridge mode or transparent mode   |
| Should provide NAT functionality, including PAT   |
| Should support Policy-based NAT   |
| Should support User-Group based Authentication  |
| Should support device based and OS based policies   |
| Should have IPv6 support for both NAT and Transparent Mode  |
| Should support the creation of up to 10 virtual instances on the device itself. Any required licenses should be included.   |
| <b>Authentication Requirements</b>  |
| Should have support for authentication at the firewall policy level   |
| Should have support for external RADIUS, LDAP and TACACS + integration for User and Administrator Authentication  |
| Should support for Native Windows Active Directory Integration  |
| Should support PKI/Digital Certificate based two-factor Authentication for Administrators   |
| <b>Administration &amp; Management Requirements</b>   |
| Should support WebUI (HTTP/HTTPS) and CLI (Telnet/ SSH) based management  |
| Should have configurable options to define remote access to the device on any interface and restrict the same to a specific IP/Subnet (i.e., Trusted Hosts for Management)  |
| Should support connecting directly to the device through a console connection (RJ45 or DB9)   |
| Should Support have SNMPv2c and SNMPv3  |
| Should Be Able to generate automatic notification of events via mails/syslog  |
| Should be able to send alerts to multiple email recipients  |
| Should support role-based administration of the device  |
| Should support simultaneous login of multiple Administrators  |
| Should have provision to customize the dashboard by selecting suitable Widgets etc.   |
| Should provide a means for exporting the device rule set and configuration to a text file via Web or TFTP   |
| Should support for image upgrade via FTP, TFTP and WebUI  |
| Should support system software rollback to the previous version during upgrade  |
| <b>Encryption &amp; VPN Requirements</b>  |
| Should have integrated VPN that support the following protocols DES, 3DES, MD5, SHA-1, SHA-256, MD5, Diffie-Hellman Group1, Group2, Group 5, IKE v1/2, AES 128/192/256  |
| Should support hub and spoke VPN topology   |
| IPSec VPN shall support XAuth over RADIUS and RSA SecurID   |
| Should have integrated SSL VPN with no user license slab restriction  |
| Should support SSL two-factor authentication with Digital Certificates, or Hardware/Mobile tokens   |



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| Should support Single Sign-On Bookmarks for SSL Web VPN  |
| Should support Windows, Linux and MAC OS for SSL-VPN. (Shall have always-on clients for the said OSs apart from browser based access.)   |
| Should support NAT within IPSec/SSL VPN tunnels  |
| Should support PPTP and L2TP over IPSec VPN protocols  |
| <b>SD WAN Support</b>  |
| Should Support redundant links with active/active traffic load balancing   |
| Should Support for multiple WAN link types (4G LTE, Fiber, MPLS, ILL, etc.)  |
| Should Support Encryption of the WAN transport   |
| Monitor the quality of the WAN links (packet loss, jitter and delay) and support for creating Service Level Agreements (SLA) based on the monitored statistics   |
| Support Forward Error Correction (FEC) and packet duplication as WAN remediation techniques  |
| Should provide a method for providing direct branch to branch WAN connectivity   |
| User/User-group based traffic steering should be available to be implemented for SD-WAN policies.  |
| Application based traffic steering should be available to be implemented for SD-WAN policies. Applications should be selectable by specifically by name in the SD-WAN policies.  |
| SD-WAN policies should provide multiple WAN strategy options. Minimally <ul style="list-style-type: none"> <li>• Should Be Able to Manually assign WAN link to an application/Internet service</li> <li>• Should Be Able to Assign the best quality WAN link as per the measured performance (based on packet loss, jitter, latency, bandwidth or a custom profile) to an application/Internet service</li> <li>• Should Be Able to Assign the WAN link with the lowest SLA target to an application/Internet service</li> </ul> Should be Able to Load balance traffic across all WAN links that meet the SLA targets |
| <b>IPS and Application Control Requirements</b>  |
| Should have built-in Signature and Anomaly based IPS engine on the same unit   |
| Should be able to mitigate denial of service attacks   |
| Should be able to mitigate buffer overflow attacks   |
| Proposed device should have an IPS Certified by an independent certification/testing body such as NSS Labs and ICSA  |
| Should identify and control applications   |
| Should be able to control popular IM/P2P, social media, malware, applications regardless of port/protocol  |
| Should be able to control cloud-based applications and should able to route the specific applications via different WAN links based on the jitter and latency on the link  |
| <b>Gateway Antivirus</b>   |
| Should facilitate embedded gateway antivirus support   |
| Should include anti-spyware and worm prevention  |
| The Facilitated Gateway antivirus Should support real-time detection of viruses and malicious code for HTTP, HTTPS, FTP,SMTP, SMTPS,POP3, IMAP, NNTP and IM  |
| Should have configurable policy options to select what traffic to scan for viruses   |
| Should have options to prevent user downloads based on file extension as well as file type   |
| Should have support for Flow-Based Antivirus Scanning Mode   |
| Should be capable of scanning Encrypted VPN tunnel traffic originating from the client for virus   |
| Should have the ability of antivirus scanning for IPv6 traffic   |
| Should be able to Integrate with Advanced Threat Prevention solution for zero-day threat mitigation  |
| Should have an endpoint client that can co-exist with any antivirus solution and provide zero-day threat mitigation integration with Advanced Threat Prevention solution. Client should be able to identify the vulnerabilities on the endpoints   |
| <b>Web Content Filtering Requirements</b>  |
| Should facilitate embedded web content filtering feature   |
| Should work independently without the need to integrate with an external proxy server  |

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|          | Should have the facility to block URLs based on categories   |
|          | Web content filtering should support HTTP and HTTPS based traffic  |
|          | Should be able to block URLs hosting spywares/adware etc   |
|          | Should be able to block different categories/sites based on User Authentication  |
|          | Should have configurable options to allow/deny access to web sites in case if the URL rating service is unavailable  |
|          | Should have options to customize the "Blocked Webpage Message" information displayed to end users  |
|          | Should be able to Integrate with an Advanced Threat Prevention solution to prevent from zero-day threats in unknown web URLs   |
|          | Should be able to detect DNS-based spoofing attacks  |
|          | Should be able to assign usage-based and time-based quota for bandwidth web categories   |
|          | Should include DNS filtering feature to block DNS requests to known botnet C&C domains   |
|          | Proposed device shall support category based DNS filtering   |
|          | Proposed device shall support safe search for DNS requests. This feature should be supported for Google and YouTube.   |
|          | <b>Automation</b>  |
|          | Should include automation capabilities in order to take automated action based on defined triggers and the automation should be able to trigger based on specific log events, CPU/Memory high incidents, license expiry, compromised host detection.                                     |
|          | The automation actions should include running CLI scripts, email/MS teams notifications and Quarantine of endpoints.   |
|          | In response to a trigger, multiple automation actions should be supported to be carried out in parallel or sequentially  |
|          | If a CLI script is run to collect diagnostic information from the device in response to a trigger, the email notification action should be able to attach the output of the CLI script to the email body.  |
|          | <b>Other Requirements</b>  |
|          | Should Support Jumbo Frames  |
|          | Should Be Able To configure traffic shaping on policy basis, application basis and IP basis. It shall have provision to define guaranteed bandwidth and maximum bandwidth  |
|          | Should support packet capture/sniffer to capture and examine the contents of individual data packets that traverse the device  |
|          | <b>Vendor/Supplier Eligibilities</b>   |
|          | Vendor shall operate 24/7/365 global Technical Assistance Center (TAC) with telephone and e-mail support.  |
|          | Bid Submitter Should be authorized by the original manufacturer and submit the Original Manufacture's Authorization Certificate along with the bid   |
|          | <b>Warranty &amp; Subscriptions</b>  |
|          | The proposed firewall should have OEM authorized warranty / support services (TAC) for 24x7 for at least One (01) year   |
|          | The proposed firewall should minimally include 1-Year security subscription with IPS, Advanced Malware Protection, Application Control, Antivirus, Mobile Malware, Botnet, CDR, Virus Outbreak Protection and Cloud Sandbox Service  |
| <b>3</b> | <b>01 Nos x Centralized Management Appliance</b>   |
|          | The SD WAN Solution should have a centralized management appliance for managing a minimum 20 firewall appliances of the same OEM from a single console. The centralized Management Solution Should Be of a Virtual Appliance   |
|          | The proposed virtual appliance should support the following virtualization platforms at a minimum <ul style="list-style-type: none"> <li>• VMware ESX/ESXi</li> <li>• Microsoft Hyper-V</li> <li>• Citrix XenServer, KVM</li> <li>• Amazon Web Services (AWS)</li> </ul> Microsoft Azure |
|          | Should provide the ability to collectively configure the device settings, objects and policies across all the firewalls from a single user interface   |

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|          | Should provide the ability to review, approve and audit policy changes from a central console   |
|          | Should support automated process to facilitate policy compliance and policy lifecycle management  |
|          | Should support enforcing workflow to reduce risk for policy and configurations changes  |
|          | Should support providing security updates for all managed devices from the management solution itself.  |
|          | Should Provide and Support A RESTful API which allows to create customized, branded web portals for policy and object administration  |
|          | Should provide a convenient method for alerting administrators when critical events are encountered, by sending e-mail alert(s) to administrator defined e-mail address(es)   |
|          | Should provide the ability to create multiple subaccounts or virtualized sub accounts with each account having its own administrators/users with access/views to only their respective devices.   |
|          | Should have the capability to maintain audit trail (history) of all configuration changes. These different versions should be comparable to each other to identify differences. The solution should also provide the ability to restore to previous configuration versions.       |
|          | Should provide the operational status, performance data and firmware information of all managed devices.  |
|          | Should provide monitoring capabilities for the managed device SD-WAN features.  |
|          | Policy creation, management and application of policies.  |
|          | Support for firmware Management/upgrades for the managed devices from a central console   |
|          | Should Provide traffic and performance statistics of the Managed Devices  |
|          | Should Support certificate management for all the managed devices   |
|          | Should support Zero-touch provisioning (ZTP) for provisioning managed devices, when new Devices are being deployed in remote locations with minimum intervention of an on-site technical personnel  |
|          | The Management Solution should function in a manner that failure of the Management solution Should not impact the managed devices traffic flow  |
|          | The management solution should be able to fetch the configurations from the managed devices and rebuild the management database in case of complete data loss of the management appliance.  |
|          | Should include a central log retention capability to receive logs from all the managed firewall devices.  |
|          | Role Based Access Control (RBAC) should be supported for granting different authorization levels to different administrators in a granular manner   |
|          | <b>Vendor/Supplier Eligibilities</b>  |
|          | Vendor shall operate 24/7/365 global Technical Assistance Center (TAC) with telephone and e-mail support.   |
|          | Bid Submitter Should be authorized by the original manufacturer and submit the Original Manufacture's Authorization Certificate along with the bid  |
|          | <b>Warranty &amp; Subscriptions</b>   |
|          | The proposed solution should have OEM authorized warranty / support services (TAC) for 24x7 for at least One (01) year  |
| <b>4</b> | <b>01 Nos x Centralized Logging and Reporting</b>   |
|          | Logging and Reporting Solution should be an out of the box solution. Should be proposed as a virtual appliance  |
|          | Proposed virtual appliance should be capable of handling a minimum 5GB of logs per day.   |
|          | The solution should provide with threat feed subscription for identifying comprised hosts along with automation incident response actions.  |
|          | Logging and Reporting solution should support to integrate multiple devices (From the Same Brand) and should provide the ability to create multiple virtualized subaccounts with each account having its own administrators/users with access to only their respective firewalls. |
|          | Should be able to view the current session details from the dashboard, including, Source, Destination, Country, Application, etc.   |
|          | The proposed solution Should include a central log retention for all the appliances added to it from the same OEM solution.   |

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|          | The proposed solution should be able to integrate with Incident management systems, ticketing solutions and should be able to generate events based on the configured handlers and accordingly send email alerts to intended recipients.  |
|          | Should include inherited log archiving capabilities and should be able to customize according to the Administrators requirement.  |
|          | The complete traffic and system event logs should be retained in the logging solution   |
|          | Should be able to Archive logs after the defined analytics retainment period and should be able to export and import back for analytics to and from to an external backup.  |
|          | Should provide administrator authentication via TACAS/RADIUS/LDAP and should support role-based access management.  |
|          | The solution should support alerting notifications through SNMP traps, email, and remote syslog.  |
|          | The Reporting capabilities should not be limited to templates or predefined formats based on the administrator's requirement. Also, it should be able to create custom reports.   |
|          | Should support out of the box Management reports for NGFW and should be able to create any new reports based on custom database queries.  |
|          | Should support to generate the following customized reports for daily, weekly, monthly, yearly etc., and but not limited to link bandwidth utilization, device health monitors, security enforcements, system logins.   |
|          | Should provide the ability to schedule reports to run at non-peak hours or run-on demand. Should be able to send the reports to intended recipients via email.  |
|          | All reports must be exportable in PDF, HTML and CSV formats.  |
|          | <b>Vendor/Supplier Eligibilities</b>  |
|          | Vendor shall operate 24/7/365 global Technical Assistance Center (TAC) with telephone and e-mail support.   |
|          | Bid Submitter Should be authorized by the original manufacturer and submit the Original Manufacture's Authorization Certificate along with the bid  |
|          | <b>Warranty &amp; Subscriptions</b>   |
|          | The proposed central management solution shall have OEM authorized warranty / support services (TAC) for 24x7 for One (01) year   |
| <b>5</b> | <b>Installation, Configuration, Migration and Training</b>  |
|          | Hardware installation including mounting, management cabling and power up as per manufacturer guideline   |
|          | The vendor MUST have at minimum the following full time OEM Certified Professional/Engineer under its payroll to provide installation, configuration, integration, migration and training services. All relevant engineer(s) certificates and supporting documents shall be included with the proposal.<br><u>Primary required certificates of the engineer(s):</u><br><ul style="list-style-type: none"> <li>•Cisco CCNA Certified for Routing and Switching Certified</li> <li>•Cisco CCNA and CCNP Certified for Security Certified</li> <li>•OEM Certified for the Proposed Firewall</li> </ul> |
|          | Perform site readiness assessment ensuring hardware environment is ready for project commencement   |
|          | Identify and assess existing environment including network security devices, core network switching and routing devices.  |
|          | Ensure current deployment and configuration is setup such that the configuration and migration works can be conducted with minimal downtime.  |
|          | Shall provide planning, deployment and user acceptance test details   |
|          | The devices and appliances shall be installed and configured as per manufacturer best practice guidelines and as per industry best practices.   |
|          | Upgrade to the latest release of stable firmware and confirm it is at a supported and appropriate version.  |
|          | Configure secure management console for all devices and appliances.   |
|          | Install or register any license keys for the purchased  |
|          | Design appropriate LAN,WAN, and DMZ security policies.  |
|          | Configure application control policies  |
|          | Configure AV and Web filtering policies   |



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| 4.3  | قۇرۇلۇش ئۆلچەملىرى ۋە / سۈمۈرۈش ۋە داۋاملىق بۇلغۇنۇش   |
| 4.4  | بىر تەرەپ قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى  |
| 4.5  | قۇرۇلۇش ئۆلچەملىرى (ئۆلچەملىرى) ۋە بىر تەرەپ قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى   |
| 4.6  | قۇرۇلۇش ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى / قىممەت ئۆلچەملىرى / قىممەت ئۆلچەملىرى / قىممەت ئۆلچەملىرى |
| 4.7  | قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى  |
| 4.8  | قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى     |
| 4.9  | قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى     |
| 4.10 | قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى     |
| 4.11 | قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى     |
| 4.12 | قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى     |
| 4.13 | قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى     |
| 4.14 | قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى، قىممەت ئۆلچەملىرى     |

| سۆھبەت سۆھبەت ۋە تەكشۈرۈش ئۆلچەملىرى |   |   |
|--------------------------------------|---|---|
| سۆھبەت سۆھبەت ۋە تەكشۈرۈش ئۆلچەملىرى | سۆھبەت سۆھبەت ۋە تەكشۈرۈش ئۆلچەملىرى  | سۆھبەت سۆھبەت ۋە تەكشۈرۈش ئۆلچەملىرى (100%) |
| Price                                | $\frac{\text{Lowest Proposed Price}}{\text{Proposed Price By Bidder}} \times 70$  | 70%   |
| Experience                           | <ul style="list-style-type: none"> <li>4 points for each reference letter / completion certificate signed and stamp by the client.</li> <li>Each bidder will get maximum 20 points</li> </ul> | 20%   |
| Delivery                             | $\frac{\text{Lowest Proposed duration (in Days)}}{\text{Bidder's Proposed duration (in Days)}} \times 10$   | 10%   |









National Centre for Information Technology

| رقم  | اسم | معلومات شخصية  |
|--|-----|----------------|
| <p>معلومات شخصية</p> <p>اسم:</p> <p>الاسم:</p> <p>اللقب:</p> <p>تاريخ الميلاد:</p> <p>الجنس:</p> <p>الجنسية:</p> <p>الديانة:</p> <p>معلومات اخرى:</p> <p>معلومات اخرى:</p> |     |                |
| <p>رقم</p> <p>اسم</p>  |     | اسم:           |
|  |     | الاسم:         |
|  |     | اللقب:         |
|  |     | تاريخ الميلاد: |
|  |     | الجنس:         |
|  |     | الجنسية:       |
| <p>معلومات اخرى</p> <p>معلومات اخرى</p> <p>معلومات اخرى</p>  |     |                |
|  |     | اسم:           |
|  |     | الاسم:         |
|  |     | اللقب:         |
|  |     | تاريخ الميلاد: |
|  |     | الجنس:         |
|  |     | الجنسية:       |





National Centre for Information Technology

| <b>Financial Data for Previous 03 Years [MVR Equivalent]</b>   |             |             |             |
|--|-------------|-------------|-------------|
| <b>Financial Information of the Year</b>   | <b>2019</b> | <b>2020</b> | <b>2021</b> |
| <b>Information from Balance Sheet</b>  |             |             |             |
| Total Assets   |             |             |             |
| Total Liabilities  |             |             |             |
| Net Worth  |             |             |             |
| Current Assets   |             |             |             |
| Current Liabilities  |             |             |             |
| Working Capital  |             |             |             |
| <b>Information from Income Statement</b>   |             |             |             |
| Total Revenues   |             |             |             |
| Profits Before Taxes   |             |             |             |
| Profits After Taxes  |             |             |             |
| <ul style="list-style-type: none"> <li>Attached are copies of financial statement (balance sheets including all related notes, and income statements), as indicated above, complying with the following conditions.</li> <li>All such documents reflect the financial situation of the Bidder.</li> <li>Historic financial statement must be complete, including all notes to the financial statements.</li> <li>Historic financial statements must correspond to accounting periods.</li> </ul> |             |             |             |

**Evaluation criteria**

**Financial Situation evaluation**

- A. To be eligible the financial statements of the bidding party must show, average annual turnover of MVR 740,000.00 for the years 2019, 2020 and 2021.  
(or)
- B. To be eligible the financial statements of the bidding party must show, Minimum value of MVR 740,000.00 of the proposed price, for liquid asset, for the year 2019, 2020 and 2021.  
(or)
- C. If bidding party is unable to meet any of the above requirement they shall submit “Line of Credit Letter” as per the template in Form FIN – 3. (credit limit shall be no less than MVR 740,000.00 of the proposed price)

Bidder Stamp and Sign

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## Form of Bid Security (Bank Guarantee)

WHEREAS, .....[*name of Bidder*] (hereinafter called “the Bidder”) has submitted his Bid for the Project no.....issued by National Centre for Information Technology ..... for construction of .....[*name of Contract*] (hereinafter called “the Bid”).

KNOW ALL PEOPLE by these presents that We ..... [*name of Bank*] of ..... [*name of country*] having our registered office at ..... (hereinafter called “the Bank”) are bound unto .....[*name of Purchaser*] (hereinafter called “the Purchaser”) in the sum of \*..... for which payment well and truly to be made to the said Purchaser, the Bank binds itself, its successors, and assigns by these presents.

SEALED with the Common Seal of the said Bank this .....day of .....20.....

THE CONDITIONS of this obligation are:

- (1) If, after Bid opening, the Bidder withdraws his Bid during the period of Bid validity specified in the Form of Bid;
- or
- (2) If the Bidder having been notified of the acceptance of his Bid by the Purchaser during the period of Bid validity:
  - (a) fails or refuses to execute the Form of Agreement in accordance with the Instructions to Bidders, if required; or
  - (b) fails or refuses to furnish the Performance Security, in accordance with the Instruction to Bidders; or
  - (c) does not accept the correction of the Bid Price pursuant to Clause 27,

\* The Bidder should insert the amount of the Guarantee in words and figures denominated in Maldivian Rufiyaa. This figure should be the same as shown in Clause 16.1 of the Instructions to Bidders.

we undertake to pay to the Purchaser up to the above amount upon receipt of his first written demand, without the Purchaser’s having to substantiate his demand, provided that in his demand the Purchaser will note that the amount claimed by him is due to him owing to the occurrence of one or any of the three conditions, specifying the occurred condition or conditions.

This Guarantee will remain in force up to and including the date ..... days after the deadline for submission of bids as such deadline is stated in the Instructions to Bidders or as it may be extended by the Purchaser, notice of which extension(s) to the Bank is hereby waived. Any demand in respect of this Guarantee should reach the Bank not later than the above date.

DATE..... SIGNATURE OF THE BANK

WITNESS ..... SEAL

[*signature, name, and address*]

# Form of Performance Bank Guarantee (Unconditional)

To: .....  
[name & address of Purchaser]  
.....  
.....

WHEREAS ..... [name and address of Supplier] (hereinafter called "the Supplier") has undertaken, in pursuance of Contract No. .... dated ..... to execute ..... [name of Contract and brief description of Works] (hereinafter called "the Contract");

AND WHEREAS it has been stipulated by you in the said Contract that the Supplier shall furnish you with a Bank Guarantee by a recognized bank for the sum specified therein as security for compliance with his obligations in accordance with the Contract;

AND WHEREAS we have agreed to give the Supplier such a Bank Guarantee;

NOW THEREFORE we hereby affirm that we are the Guarantor and responsible to you, on behalf of the Supplier, up to a total of \* ..... [amount of Guarantee] ..... [amount in words], such sum being payable in the types and proportions of currencies in which the Contract Price is payable, and we undertake to pay you, upon your first written demand and without cavil or argument, any sum or sums within the limits of ..... [amount of Guarantee] as aforesaid without your needing to prove or to show grounds or reasons for your demand for the sum specified therein.

\*An amount is to be inserted by the Guarantor, representing the percentage of the Contract Price specified in the Contract, in Maldivian Rufiyaa.

We hereby waive the necessity of your demanding the said debt from the Supplier before presenting us with the demand.

We further agree that no change or addition to or other modification of the terms of the Contract or of the Works to be performed there under or of any of the Contract documents which may be made between you and the Supplier shall in any way release us from any liability under this Guarantee, and we hereby waive notice of any such change, addition, or modification.

This Guarantee shall be valid until the date of issue of the Defects Correction Certificate.

SIGNATURE AND SEAL OF THE GUARANTOR .....  
Name of Bank .....  
Address .....  
.....  
Date .....



7.1. 7. סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .

7.2. מספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
מספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
מספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .

8.1. 8. סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .

(א) סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .

(ב) סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .

(ג) סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .

(ד) סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .

(ה) סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .  
סיומת  $10^7$  במספר  $10^7$  וסיומת  $10^6$  במספר  $10^6$ .



8.2. כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 10.55 מ"ק לשעה.  
 כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 10.55 מ"ק לשעה.

8.3. כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 10.55 מ"ק לשעה.

9.1. כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 10.55 מ"ק לשעה.  
 כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 10.55 מ"ק לשעה.

9.2. כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 10.71 מ"ק לשעה.  
 כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 10.71 מ"ק לשעה.

9.3. כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 5,000,000 ל"ט לשנה.  
 כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 5,000,000 ל"ט לשנה.

$$CP \cdot 0.005 \cdot LD = \text{כמות המים הנדרשת לשימוש במתקן טיהור מים}$$

כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 5,000,000 ל"ט לשנה.  
 כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 5,000,000 ל"ט לשנה.

$$CP \cdot 0.0025 \cdot LD = \text{כמות המים הנדרשת לשימוש במתקן טיהור מים}$$

CP (מספר המים הנדרשת לשימוש במתקן טיהור מים): כמות המים הנדרשת לשימוש במתקן טיהור מים

LD (מספר המים הנדרשת לשימוש במתקן טיהור מים): כמות המים הנדרשת לשימוש במתקן טיהור מים

9.4. כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 10.55 מ"ק לשעה.  
 כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 10.55 מ"ק לשעה.

9.5. כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 15% מ-10.55 מ"ק לשעה.  
 כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 15% מ-10.55 מ"ק לשעה.

9.6. כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 15% מ-10.55 מ"ק לשעה.  
 כמות המים הנדרשת לשימוש במתקן טיהור מים תהיה 15% מ-10.55 מ"ק לשעה.

הממונה על הביטוח הלאומי, בהתאם להחלטת הממשלה, מודיע כי...

9.7. הן המעבידים והן המעובדים יישמו את ההוראות...

10. המעבידים יודיעו לרשות המוסמכת על כל שינוי...

11.1. המעבידים יודיעו לרשות המוסמכת על כל שינוי...

12.1. המעבידים יודיעו לרשות המוסמכת על כל שינוי...

הממונה על הביטוח הלאומי, בהתאם להחלטת הממשלה, מודיע כי...

דואר אלקטרוני (דוא"ר) / דואר אלקטרוני (דוא"ר)

מס':

דוא"ר:

דואר אלקטרוני (דוא"ר)

