BIDDING DOCUMENT

ADDENDUM NO. 1

National Competitive Bidding (NCB)

Procurement of supply delivery, installation and configuration of automated backup solution for Lanka Government Cloud (LGC 2.0)

[IFB No: ICTA/GOSL/GOODS/NCB/2021/05]

November 2021

Following changes introduced Section V. Schedule of Requirements of the RFP

Accordingly Following documents are amended.

2.0 List of Related Services – Changed as follows
- I.   Delivery and Installation period of the Item 1 changed from 8 weeks to 10 weeks
- II.   Delivery and Installation period of the Item 1 changed from 10 weeks to 11 weeks

3. Technical Specifications (Capability compliance sheet)

- I.   Changers introduced to the Item 3,12,26 and 27
- II.   Item 29,30 and 31 have been newly introduced

Item No	Initial	Item No	Changers / Newly Introduced
3	Solution shall be designed for Self-Service and integrate into the Redhat Openstack UI, CLI redhat cloudform and follow the same pattern in the API. All with Self-Service in mind.	3	Solution shall be designed for Self-Service and integrate into the Redhat Openstack 16.1 UI, CLI Redhat cloudform and follow the same pattern in the API. All with Self-Service in mind.
12	Solution shall Recover whole environment or individual VMs to a point-in-time.	12	Solution shall Recover whole tenant and/ or individual VMs to a point-in-time.
26	Shall be to recover the most critical workloads in < 1 hour	26	Shall be support to recover the most critical workloads in < 1 hour
27	**Note:** Target backup device/solution Minimum capacity shall be 250TB (Effective) and can be scale when in future need. LGC2 Site 1 Compute nodes - 32 shall be covered from this solution.	27	**Note**: Target backup device/solution Minimum capacity shall be 350TB (Effective) and can be scale when in future need. Total data capacity to be backup - 250TB LGC2 Site 1 Compute nodes - 32 shall be covered from this solution.
		29	Proposed solution shall be provide proactive protection of newly added data-sets (VMs, etc), Auto discover workloads and backup accordingly
		30	Proposed Solution shall be able to Configure encryption both at-rest and in-transit
		31	Proposed solution shall provide comprehensive monitoring and custom reports generate capability

2.0 List of Related Services

Item No	Description of Services	Delivery and Installation	Final (Project Site) Destination as specified in BDS	Related Services
1	Backup Solution (Delivery of Hardware and Licenses subscription)	Commencement Date + 10 Week	Lanka Government Cloud 2.0	Supply, Delivery, Installation, Commissioning and Maintenance
	Target Backup Storage Solution			
2	Completed environment with installations, Configurations, and testing	Commencement Date + 11 Week		
3	UAT and commissioning, Final documentations and Training (5 Participants)	Commencement + 12 Week		

3. Technical Specifications (Capability compliance sheet)

Bidders are required to state their compliance to specifications/requirements against each and every criterion of the specification sheets. Incomplete / non-compliant specification sheets will strongly lead to disqualification of the bidder without getting any clarifications.

Item 1: Automated Backup as a service for Lanka Government Cloud

Item No.	Minimum Specification	Compliance to the specification (Yes / No) If "No" bidder's response	Technical reference (Please specify the page number)
1	Solution shall utilize the Openstack APIs to gather and safely backup all information from the 5 core projects Nova, Cinder, Glance, Neutron and Keystone. ex- Trilio vault or commvault or equivalent.		
2	Proposed solution shall be enterprise-grade Data Center Backup & Recovery Solutions		
3	Solution shall be designed for Self-Service and integrate into the Redhat Openstack 16.1 UI, CLI Redhat cloudform and follow the same pattern in the API. All with Self-Service in mind.		
4	Solution shall not install any agent on vms and instead it should use native API.		
5	Shall follows a service driven scale-out architecture. should be scale by adding service/tool to the compute nodes and giving each take care of the VMs on its compute node.		
6	Solution shall provide true Multi-Tenancy by giving each backup and backup-job a dedicated owner. Not even administrators can work backup they don't own them.		
7	Adding solution to openstack shall be non-disruptive.		
8	Solution shall architected for efficient use of IT Ops and DevOps with cloud-native compatibility.		
9	Solution shall be able to schedule automated incremental backups on a pre-defined or on-demand basis.		
10	Solution shall be capable of selectively restoring virtual machines to target network, availability zones, regions and clouds.		
11	Proposed platform shall provide instant Recovery, fast & easy restoration		

Item No.	Minimum Specification	Compliance to the specification (Yes / No) If "No" bidder's response	Technical reference (Please specify the page number)
12	Solution shall Recover whole tenant and/ or individual VMs to a point-in-time.		
13	Shall provide Chargeback for tenant usage & consumption.		
14	Solution shall captures and stores following, but not limited to • Security groups, which include firewall rules for each instance; network configurations including subnets and netmasks; and availability zones from the OpenStack Neutron networking service. • VM flavors and VM metadata from the OpenStack Nova compute service. • Volume configuration and volume types from the OpenStack Cinder block storage service. • VM images from the OpenStack Glance image service.		
15	The backup solution must be able to backup servers with the following "operating systems" list: • Oracle Enterprise Linux • Red Hat Enterprise Linux 7,8 (64-bit) • Microsoft Windows Server 2012 R2 (64-bit) • Microsoft Windows Server 2016 (64-bit) • Microsoft Windows Server 2019 R2 • Ubuntu/Debian linux • etc		
16	Backup/Restore solution shall support: Full back up (baseline backup), Incremental backup forever, synthetic backup and restores.		
17	Backup offload/Target storage solution/appliances shall be proposed by Bidder. Backup target device should have deduplication. • Object Storage or equivalent. • Minimize management with simplified expansion.		
18	Openstack multi tenancy visibility to Backup control dashboard where admin can control backups of specific tenants		

Item No.	Minimum Specification	Compliance to the specification (Yes / No) If "No" bidder's response	Technical reference (Please specify the page number)
19	Should be able to create multiple backup user accounts delegating specific OpenStack tenant backup permissions		
20	Network requirements: Bidder should propose along with the solution, Implementation should be non/minimum-disruptive		
21	Target backup solution shall be in HA or redundancy mode.		
22	Target backup shall be highly efficient for network-based replication to another DC(Offsite).		
23	**Backup Performance:** Shall be able to set low RPOs for production environments without complicated infrastructure		
24	Shall be able to create multiple recovery points per day with minimal production impact		
25	**Restore Performance:** Shall be able full recovery from critical events (ransomware, data center loss, etc.) in a few hours		
26	Shall be support to recover the most critical workloads in < 1 hour		
27	**Note**: Target backup device/solution Minimum capacity shall be 350TB (Effective) and can be scale when in future need. Total data capacity to be backup - 250TB LGC2 Site 1 Compute nodes - 32 shall be covered from this solution.		
28	The proposed system must allow the ability to provide additional capacity as ICTA requirement scale		
29	Proposed solution shall be provide proactive protection of newly added data-sets (VMs, etc), Auto discover workloads and backup accordingly		
30	Proposed Solution shall be able to Configure encryption both at-rest and in-transit		
31	Proposed solution shall provide comprehensive monitoring and custom reports generate capability		