



**BOTSWANA
EXAMINATIONS
COUNCIL**

DIRECTORATE OF INFORMATION, COMMUNICATIONS AND TECHNOLOGY

INVITATION TO TENDER

FOR

The Supply, Delivery and Implementation of a Private Cloud Solution based on Hyper
Converged Infrastructure

TENDER NO. BEC ICT 002/22-23

Tender Collection Date: *Monday 20 June 2022*

Tender Closing Date: *Friday 22 July 2022*

PROCURING ORGANISATION	AGENT
Botswana Examinations Council, Private Bag 0070, Gaborone, Botswana	The Secretary to the Tender Committee, Private Bag 0070, Gaborone, Botswana Tel: +267 365 0700 Fax: +267 393 3872 Email: procurement@bec.co.bw

Tender No. BEC ICT 002/22-23

The Supply, Delivery and Implementation of a Private Cloud Solution Based on a Hyper Converged Infrastructure

- Bidders are invited to submit bids for the Supply, Delivery and Implementation of a Private Cloud Solution based on Hyper Converged Infrastructure to Botswana Examinations Council.
- The Procuring Organisation is Botswana Examinations Council (BEC) and this tender is reserved for 100% Citizen Owned Companies in accordance with Statutory Instrument 23 of 2020 dated 28th February 2020.
- Bidders must, in order to be considered for award of the contract:
 - Submit a certificate or letter from vendor of the proposed equipment and the Hyper Converged Infrastructure solution showing that they are a vendor partner which is authorized to sell, support and maintain the equipment.
 - Submit a copy of a letter or certificate from the vendor of the Hyper Converged solution showing that the bidder is a vendor partner who is authorized to sell, the Hyper Converged Infrastructure solution;
 - Be registered with **PPADB under Code 120 – ICT Technical Support Services; Sub-Code 01 – System Development Services and Maintenance Services, or Sub-Code 02- Server Management and Maintenance Services - or Sub-Code 03: Data Centre Maintenance and Hosting Facilities; or Code 203 : Electrical, Electronic, Mechanical, Fire and ICT Supplies, Sub-Code 01: Electrical and Electronic Equipment, Spares, and Accessories (includes ICT, photographic equipment and others);**
 - Be registered with BURS and be in possession of a Valid Tax Clearance Certificate.

Tender documents will be available with effect from Monday 20th June 2022 and will be **sent to bidders** upon payment of a non-refundable and non-transferable fee of P250.00 payable to the following BEC Account details:

Account Name: BEC
Bank Name: First National Bank
Account Number: 6222 132 9940
Branch Name: Corporate
Branch Code: 282267
Swift Code: FIRNBWGX

(NB: The fee for the youth is P125.00 non-refundable and non-transferable)

Bidders are advised to use **44444** as reference number. The tender document will be sent to the bidder upon receipt of proof of payment and after verification that funds have been received in the BEC account.

The tender document is available from Botswana Examinations Council website <http://www.bec.co.bw/docs/invite-tender> for viewing purposes only.

NOTE:

1. Tender responses will be accepted from companies that were sent the electronic ITT by BEC only.
2. There will be no issuing of hard copies of ITTs to bidders.

Proof of Payment must be sent to procurement@bec.co.bw as well as tmogapi@bec.co.bw and must be included in the Bid Responses, failing which the bid will be disqualified. The tender document will be sent to the bidders upon receipt of their proof of payment and after verification that funds have been received in the BEC account.

BEC shall send the ITT document to bidders who provided proof of payment by end of day (16:30hrs) on **15th July 2022**. No bidder's proof of payment shall be accepted after this time and will therefore not be sent the ITT document. Please note that the tender fee remains non-refundable and non-transferable even with this requirement.

The Botswana Examinations Council's addresses are as follows:

Postal Address

Botswana Examinations Council
Private Bag 0070
Gaborone.

Physical Address

Botswana Examinations Council
Plot 54864, KT Motsete Road
Gaborone.

Contact Name: Mr T. Mogapi Telephone Number: 365 0700
Fax: (+267) 393 3872 Email: procurement@bec.co.bw

Delivery of bid response and the solution shall be made to BEC.

Bids must be submitted using the **one envelope system**; one original and four (4) copies **plus a soft copy in a re-writable CD/DVD** envelope accordingly labeled with the tender number and title. This envelope should be sealed and labeled as follows; **TENDER NO. BEC ICT 002/22-23: The Supply, Delivery and Implementation of a Private Cloud Solution based on Hyper Converged Infrastructure**

Bids must arrive not later than **10:00am** (local time) on **Friday 22nd July 2022**. Bids received after the closing date and time will **NOT** be accepted. Telephonic, telegraphic, telex or facsimile bids will **NOT** be accepted.

Sealed bids should be delivered to the following address

The Secretary; Tender Committee; Botswana Examinations Council
Plot 54864, KT Motsete Road; Gaborone.

Responses that do not have the required number of envelopes will be disqualified. Re-writable CDs/DVDs should be included in the envelope.

Bidders who are awarded the tender should by no means pass it to other parties to undertake the project.

Queries and questions relating to the issue of these documents will be accepted up to **5 working days** before tender closing date. The queries or questions should be in writing and should be addressed to:

The Secretary Att: Mr T. Mogapi Tel: 3650700

Tender Committee; Botswana Examinations Council
Private Bag 0070; Gaborone; Botswana.
Fax: (+267) 323 3872 Email: procurement@bec.co.bw

Bids must arrive no later than **10:00 am** (local time) on **Friday 22nd July 2022**. The tenders will be opened in the presence of bidders wishing to attend immediately after closing in BEC premises. Bids received after the closing date and time will not be accepted. Telephonic, Telegraphic, Telex, Email or Facsimile bids will not be accepted.

The proposal must be made in English.

Sealed bids should be delivered to the following address

The Secretary; Tender Committee
Botswana Examinations Council
Plot 54864, KT Motsete Road; Gaborone.

The tender document is available from BEC website: www.bec.co.bw. **Bidders are advised that this document will not be issued as a hard copy.**

The tender document may be viewed from BEC website: <http://www.bec.co.bw/docs/invite-tender>. Bidders are advised that this document is for viewing purposes only. Bid responses will only be accepted from bidders who were sent the bid document electronically by BEC.

Responses that do not have the required number of envelopes will be disqualified.

Bidders who are awarded the tender should by no means pass it to other parties to undertake the project.

N.B. The selected bidder shall begin work immediately and deliver the Services from September 2022 to November 2024.

Important Dates:

Tender Collection: Monday 20th June 2022

Tender Closing: Friday 22nd July 2022 at 1000 hrs.

Botswana Examinations Council is **not** bound to accept the lowest or any bid or bear any expense in the preparation thereof. The Botswana Examinations Council also reserves the right to award the tender in full or in parts.

Tender Committee Secretary
For/Botswana Examinations Council

BEC ICT 002/22-23: The Supply, Delivery and Implementation of a Private Cloud Solution based on Hyper Converged Infrastructure

The conditions of tender are contained in this document. Bids must be submitted using the **one envelope system**

- 1.1 The Procuring Organisation is the Botswana Examinations Council.
- 1.2 The tender documents issued by the Procuring Organisation comprise:

Three volume approach:

VOLUME 1: TENDERING PROCEDURES

Tender Notice & Invitation to Tender
Tender Data

VOLUME 2: RETURNABLE DOCUMENTS

VOLUME 3: THE CONTRACT

Part 1 - Agreements & Contract Data

Forms of Securities

Part 2 - Pricing Data

Pricing Instructions

Part 3 - Scope of Work

- 1.3 All bidders are required to submit the following:

- a) 1 original, **4** copies and CDs/DVDs of the proposal.
- b) PPADB Registration Certificate under:
 - Code 120 – ICT Technical Support Services; Sub-Code 01 – System Development Services, or Sub-Code 02 – Server Management and Maintenance Services, or Sub-Code 03 – Data Centre Maintenance and Hosting Facilities (verification will be done on-line **OR**
 - Code 203: Electrical, Electronic, Mechanical, Fire and ICT Supplies, Sub Code 01: Electrical and Electronic Equipment, Spares and Accessories (includes ICT, photographic equipment and others) (verification will be done on-line).
- c) A Valid Copy of Tax Clearance Certificate (Provide Pin & Certificate Number for on-line verification).
- d) Completed Declaration Form for Tendering Purposes.
- e) Submission of Company Extract accompanied by confirmation of Shareholders and Directors as well as their Identity documents.
 - publicly listed companies may submit certificates (or related documents) of their controlling shareholders only.

- NB: Where the shareholder is a company, the individual shareholders of the company in question must be submitted. E.g., if ABC (Pty) Ltd submits a tender and one of its shareholders is EFG (Pty) Ltd, the shareholders in EFG should be submitted and so on until the shareholders submitted bears the names of individuals.
- f) A copy of a letter or certificate from vendor showing that the bidder is a vendor partner which is authorized to **SELL, SUPPORT and MAINTAIN** the equipment. This can also be a certificate from vendor showing that the bidder is a dealer for the Original Equipment Manufacturer.
- g) A copy of a letter or certificate from the vendor of the Hyper Converged Infrastructure Solution showing that the bidder is a vendor partner who is authorized to sell, the Hyper Converged Infrastructure solution.
- h) Completed and Signed Form of Authority of Signatory.
- i) Completed and signed Form of Offer and Acceptance.

NB: The tender response must be made in English.

Companies MUST provide evidence for the category ticked under the Local Preference Certificate so that BEC can make verifications for the preference entitlement.

A one-envelope procedure will be followed.

1.4 All bidders are required to provide the pricing schedule in the format provided in CONTRACT PART 2, Pricing Data. Bidders must also provide a detailed breakdown of the cost covering all components of the project as stated in CONTRACT PART 3, Bidders should note that the total cost of the project should not include any variable components based on exchange rates, inflation, etc. Where disbursements are based on actual expenditure, bidders should estimate the maximum expected costs, which will be reimbursed based on actual expenditure incurred.

Bidders should quote in Botswana Pula or any convertible currency.

All the quoted prices must include VAT, withholding Tax or any other taxes in accordance with the tax laws of Botswana.

The validity period for the quoted prices must be at **least 120 days** from the closing date of the tender.

BACKGROUND

Botswana Examinations Council (BEC) is a semi-autonomous body which was created by the **Botswana Examinations Council Act No. 11 of 2002**. In 2019, this act was augmented with an amendment act called the **Botswana Examinations Council (Amendment) Act No 21 of 2019**. The Council is mandated to manage and conduct examinations and assessments in general education, and technical and vocational education and training.

BEC is committed to the use of technology to achieve its objectives, and this has resulted in an increased reliance on Information and Communication Technology infrastructure and services. This reliance on technology, migration of some applications to the cloud and the advent of web-based applications has given rise to the need for new infrastructural technology which can meet BEC's computing needs and can enable it to seamlessly scale up without

affecting its operations. This has made a private cloud solution built on a Hyper Converged Infrastructure a perfect fit for its needs.

The current infrastructure consists of two sites: the Primary Site located at the BEC offices and the Disaster Recovery site located at a remote location.

Each site is divided into two clusters: the Windows Server Cluster and the Oracle Server Cluster.

The primary site Windows Server cluster consists of 4 hosts (HPE physical blade servers) whilst the secondary site Windows cluster consists of 3 hosts (HPE physical blade servers).

The primary site Oracle cluster consists of 2 hosts (HPE physical blade servers) whilst the secondary site Oracle cluster consists of 2 hosts (HPE physical blade servers).

The primary site has an HPE 3Par device for data storage and the Disaster Recovery site has a similar device. The total usable storage space in each device is 24TB.

Data is replicated at regular intervals from the primary site storage to the Disaster Recovery site storage (storage level replication).

Both environments are virtualized. The Windows Server Cluster uses the Microsoft Hyper-V virtualization technology whilst the Oracle Server Cluster uses the Oracle VM virtualization technology.

Even though the Disaster Recovery Clusters were designed purely for disaster recovery, there are some live servers running from the site as well.

The current BEC ICT infrastructure cannot withstand the ever-growing needs of the current as well as the envisaged new organizational structure which will encompass brigades and TVET. The organization shall experience an astronomical growth in its data in the foreseeable future. Thus, there is need for high data storage capacity, and sufficient computing power premised on high-speed processors with sufficient cores for the workloads and sufficient volatile memory (RAM) in both the primary and disaster recovery sites. The Private cloud is needed for the capability to provision and de-provision resources and services in the smallest amount of time possible in order to reduce the turnaround time to support business operations. It will also help to make optimal use of resources.

For Disaster Recovery purposes, BEC has a Disaster Recovery site which is currently located at the Public Procurement and Asset Disposal Board (PPADB) head office at Plot 8913 Maakgadigau Way, Gaborone West Industrial, Gaborone. The data and applications from the primary site are replicated to the Disaster Recovery site at regular defined intervals. Thus, the disaster recovery site is an important component of this project. There is need to implement a scaled down private cloud solution at the disaster recovery site to enable the disaster recovery operations such as replication and failover of virtual machines to the disaster recovery site to be conducted. As part of the replication process, snapshots of virtual machines shall be taken at regular intervals.

For backup and Recovery, BEC would like to implement a robust enterprise virtual machine backup and recovery solution that will enable it to efficiently backup its data and applications and to conduct timely recoveries whenever needed. This also includes taking backups to a virtual tape library.

It is upon this background that BEC is requesting the qualifying solution providers to submit proposals for The Supply and Implementation of a Private Cloud Solution based on a Hyper Converged Infrastructure.

SCOPE

The purpose of this invitation to tender is to solicit companies that meet the compliance criteria outlined in item 1.3 to submit proposals for the Supply, Delivery and Implementation of a Private Cloud Solution based on Hyper Converged Infrastructure to Botswana Examinations Council.

The supply, installation and configuration of the following components are in the scope of this tender:

- Hyper Converged Infrastructure hardware for the Primary Site
- Hyper Converged Infrastructure hardware for the Disaster Recovery Site
- Private Cloud Solution
- Management servers for primary site and disaster recovery site
- An enterprise Backup and Replication software .
- Dedicated backup server
- A local backup appliance
- A remote backup appliance with virtual tape library configuration
- Installation and configuration of the supplied hardware and software
- Migration of workloads (virtual servers and data) from the current environment to the new environment
- Training of three (3) administrators
- Documentation
- Post implementation support and maintenance

A more detailed and comprehensive description of the required supplies and services is outlined in tables A – I below.

Description of the Hyper- Converged Infrastructure Solution

For computing, BEC requires Hyper Converged Infrastructure nodes with specifications outlined in **table 1. Five (5)** nodes shall be for the primary site, while **Three (3)** nodes shall be for the Disaster Recovery Site.

Of the five nodes targeted for the Primary site, three nodes shall be used for the Windows Servers cluster and the remaining two nodes shall be used for the Oracle server cluster.

Of the three nodes targeted for the secondary site, two nodes shall be for the Windows server cluster, whilst one node shall be for the Oracle server cluster.

A more detailed description of the hyper converged infrastructure is outlined in tables A and B below.

Private Cloud Solution

Whereas the option of using public cloud seems cost effective as it uses an operational expenditure model as opposed to a capital expenditure model, BEC prefers to build its own private cloud so that it doesn't share its computing and storage resources with other tenants. This will also enhance its capability to comply with local data protection regulations and reduce chances of it infringing in data protection regulations of other jurisdictions. The main feature that is required is to enable ICT staff to provision virtual machines at a fraction of the time it takes in a non-cloud environment.

Management Servers

Two (2) management servers are required. One is for the primary site, while another is for the secondary site. All management software required for the Hyper Converged Infrastructure solution shall be installed in these servers. A more detailed description of the management servers is outlined in table D below.

Description of the Backup and Disaster Recovery Solution

For Backup and Recovery, BEC needs a backup application together with two backup appliances. The first backup appliance shall be used locally to store daily data backups. The second backup appliance shall be used for storing weekly, monthly, and annual data backups at an offsite location. This device shall be hosted at the Disaster Recovery site. A Virtual Tape Library shall be configured in the remote backup appliance to enable archiving of data at the DR site. The weekly backups shall be stored on virtual tapes and retained for 4 weeks, the monthly backups shall be stored on virtual tapes and retained for 12 months whilst the annual backups shall be stored on virtual tapes and retained for 20 years.

BEC shall also do a continuous data replication to the local backup appliance with the data retained for a minimum of 50 days. Thus, the backup software should be able to do both continuous data replication and saving of data to virtual tapes on the DR backup appliance.

For recovery BEC requires the functionality to recover an entire virtual machine, or a granular restore of a folder or a file in a very short time. Thus, the backup software should have this capability.

In terms of Backup and Recovery metrics, BEC requires a Recovery Point Objective of less than one (1) minute, i.e., BEC shall tolerate a data loss of at most one(1) minute, and a Recovery Time Objective of less than sixty (60) minutes.

The required specifications of the backup software and the backup appliances are outlined in the tables E,F, G and H below.

Installation, Configuration, training, Post installation support and Maintenance

This project includes the installation and configuration of all supplied hardware, software and licenses. After installation, the BEC system administrators should be given basic training on the operation and support of hyper converged infrastructure, management software and the backup and replication solution. Advanced vendor specific training which is certifiable should also be provided. Then once the solutions are implemented and an acceptance certificate signed, the three-year support and maintenance shall resume.

Table A: Hyper Converged Infrastructure Solution for Primary Site

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Proposed Specification</u>
A.1	Quantity of HCI Nodes:	5	
A.2	Vendor of Hyper Converged Infrastructure Virtualization Software:	Name the vendor here	
A.3	Position of proposed Hyper Converged Infrastructure Software in the Gartner Magic Quadrant as of April 2022:	Leaders	
A.4	Minimum Number of VMs supported	50	
A.5	Hypervisor:	Name the proposed Hypervisor here	

A.6	Native/Hypervisor based replication:	Supported	
A.7	VM Live migration capability:	Supported	
A.8	Dynamic Allocation of computing and storage capacity across aggregated hardware resources:	Supported	
A.9	I/O Striping Support:	Must support I/O striping across all hyper converged nodes for each individual virtual machine	
A.10	Replication Methods Support:	Must support the RF=2 and RF=3 Replication methods	
A.11	Snapshot Support:	Must support instant space optimized point-in-time snapshots. Should allow taking snapshots of individual virtual machines to enable to revert the VM to an older state	
A.12	HCI Cluster Scalability:	Support of up to 20 nodes per cluster	
A.13	Vendor of Hyper Converged Infrastructure solution hardware:	Name the proposed hardware vendor here	
A.14	Form factor of HCI nodes:	2U – 10U Rack mountable	
A.15	Number of processor sockets per HCI node:	4	
A.16	Required processors quantity and type on each HCI node:	Two (2) Intel Xeon processors, at least 2.5GHz or higher	
A.17	Number of cores per processor:	At least 12 cores	
A.18	Memory slots on each HCI node	At least 24 DIMM slots	
A.19	Required Total Memory on each HCI node:	At least 256GB RAM	
A.20	Required disk type on each node:	Solid State Drive (SSD) only	
A.21	Total No. of SSD Slots per Node:	At least 20	
A.22	Total Usable Storage Space on each HCI node:	At least 40TB usable storage space	
A.23	Power Supplies per HCI node:	Two (2) hot swappable power supplies	
A.24	Cooling Fans per HCI node:	Two (2) hot swappable cooling fans	
A.25	Network Connectivity – RJ45 per HCI node:	At least two (2) 1Gbps network interface (RJ45) ports	
A.26	Network Connectivity – SFP per HCI node:	At least two (2) 10/20GB dual speed SFP ports	
A.27	iLO Management Port:	At least one (1) iLO Management Port	
A.28	USB Ports per Node:	At least one (1) USB 3.0 port per node	

A.29	Display Ports per Node:	At least one (1) HDMI port or one (1) VGA port	
A.30	Management:	Remote monitoring and management of hypervisor, hardware and VMs from a single console supported.	
A.31	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.	
A.32	Vendor Support	Proactive Vendor Support with NBD parts replacement for a period of 5 years . This includes support for the virtualization software.	
A.33	End-of-Support:	At Least 5 years from 1 st April 2022. Please provide vendor website link where this information can be checked. Or provide a document from the vendor showing this information.	
A.34	End-of-Life:	At least 10 years from 1 st April 2022. Please provide vendor website link where this information can be checked. Or provide a document from the vendor showing this information.	
A.35	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories that the appliance cannot run without. These should strictly be listed under the “other accessories” column.	

Table B: Hyper Converged Infrastructure Solution for Disaster Recovery Site

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Proposed Specification</u>
B.1	Quantity of HCI Nodes:	3	
B.2	Vendor of Hyper Converged Infrastructure Virtualization Software:	Name the vendor here	
B.3	Position of proposed Hyper Converged Infrastructure Software in the Gartner Magic Quadrant as of April 2022:	Leaders	
B.4	Minimum Number of VMs supported	50	
B.5	Hypervisor:	Name the proposed Hypervisor here	
B.6	Native/Hypervisor based replication:	Supported	
B.7	VM Live migration capability:	Supported	

B.8	Dynamic Allocation of computing and storage capacity across aggregated hardware resources:	Supported	
B.9	I/O Striping Support:	Must support I/O striping across all hyper converged nodes for each individual virtual machine	
B.10	Replication Methods Support:	Must support the RF=2 and RF=3 Replication methods	
B.11	Snapshot Support:	Must support instant space optimized point-in-time snapshots. Should allow taking snapshots of individual virtual machines to enable to revert the VM to an older state	
B.12	HCI Cluster Scalability:	Support of up to 20 nodes per cluster	
B.13	Vendor of Hyper Converged Infrastructure solution hardware:	Name the proposed hardware vendor here	
B.14	Form factor of HCI nodes:	2U – 10U Rack mountable	
B.15	Number of processor sockets per HCI node:	4	
B.16	Required processors quantity and type on each HCI node:	Two (2) Intel Xeon processors, at least 2.5GHz or higher	
B.17	Number of cores per processor:	At least 12 cores	
B.18	Memory slots on each HCI node	At least 24 DIMM slots	
B.19	Required Total Memory on each HCI node:	At least 256GB RAM	
B.20	Required disk type on each node:	Solid State Drive (SSD) only	
B.21	Total No. of SSD Slots per Node:	At least 20	
B.22	Total Usable Storage Space on each HCI node:	At least 40TB usable storage space	
B.23	Power Supplies per HCI node:	Two (2) hot swappable power supplies	
B.24	Cooling Fans per HCI node:	Two (2) hot swappable cooling fans	
B.25	Network Connectivity – RJ45 per HCI node:	At least two (2) 1Gbps network interface (RJ45) ports	
B.26	Network Connectivity – SFP per HCI node:	At least two (2) 10/20GB dual speed SFP ports	
B.27	ILO Management Port:	At least one (1) iLO Management Port	
B.28	USB Ports per Node:	At least one (1) USB 3.0 port per node	
B.29	Display Ports per Node:	At least one (1) HDMI port or one (1) VGA port	
B.30	Management:	Remote monitoring and management of hypervisor,	

		hardware and VMs from a single console supported.	
B.31	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.	
B.32	Vendor Support	Proactive Vendor Support with NBD parts replacement for a period of 5 years . This includes support for the virtualization software.	
B.33	End-of-Support:	At Least 5 years from 1 st April 2022. Please provide vendor website link where this information can be checked. Or provide a document from the vendor showing this information.	
B.34	End-of-Life:	At least 10 years from 1 st April 2022. Please provide vendor website link where this information can be checked. Or provide a document from the vendor showing this information.	
B.35	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories that the appliance cannot run without. These should strictly be listed under the “other accessories” column.	

Table C: Private Cloud Solution

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Proposed Specification</u>
C.1	Virtual Machine/Virtual Private Server Creation:	Console for users to self-create Virtual Machines or Virtual Private Servers within a few minutes by specifying Number of Virtual CPUs, RAM, Storage space and Operating System.	
C.2	Automation of Virtual Machine Provisioning	Ability for all IT staff, not a single administrator to automatically provision virtual machines for themselves. These virtual machines should be automatically installed required available Operating Systems.	
C.3	Networking – Private IPs:	Configuration of private IPs for internal networking of the private cloud. These IPs shall be provided by BEC	
C.4	Networking – Public IPs:	Configuration of public IPs, for users and for administrators. These IPs shall be provided by BEC	

C.5	Subnet Segregation:	Segregate subnet for data backups and public access to BEC application systems.	
C.6	External Network Bandwidth:	Bandwidth for external network must be at least 20Mbps	
C.7	Administration Console/Dashboard:	Provision of an administrative interface for better visibility to all resources, virtual machines, templates to all users of the private cloud	
C.8	Public Cloud Integration Supported:	Yes	
C.9	Portability of Licenses between Private Cloud and Public Cloud	Full portability of licenses between Private cloud and public clouds such as Microsoft Azure and AWS	
C.10	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.	
C.11	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories and software that the appliance cannot run without. These should strictly be listed under the "other accessories" column.	

Table D: Management Servers

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Proposed Specification</u>
D.1	Quantity of Servers:	2	
D.2	Server Form factor:	1U-2U Rack mountable	
D.3	Number of processor sockets:	At least 2	
D.4	Required processor:	One (1) Intel Xeon processor, at least 2.1GHz or higher	
D.5	Total number of cores per cluster:	8 cores	
D.6	Memory slots:	At least 16 DIMM slots	
D.7	Required Total Memory:	32GB RAM	
D.8	Required disk type:	SAS	
D.9	Total Usable Storage Space:	At least 2TB usable storage space	
D.10	Power Supplies:	Two (2) hot swappable power supplies	
D.11	Network Connectivity – RJ45:	At least two (2) 1GbE Adaptors	
D.12	Network Connectivity – SFP:	At least two (2) 10/20GB dual speed SFP ports	
D.13	iLO Management Port:	At least one (1) iLO Management Port	
D.14	USB Ports:	At least two (2) USB 3.0 ports	
D.15	Micro SD Card Slot:	At least one (1) Micro SD Card Slot	
D.16	VGA Port:	At least one (1) VGA port	
D.17	DVD-CD ROM Drive:	One (1) DVD/CD-ROM drive	

D.18	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.	
D.19	Vendor Support	Basic / Foundation Vendor Support with NBD parts exchange for a period of 5 years	
D.20	End-of-Support:	At Least 5 years from 1 st April 2022	
D.21	End-of-Life:	At least 10 years from 1 st April 2022	
D.22	Other Accessories	Any other accessories and software needed for the interfacing and operation of the server to other components of the Hyper Converged Infrastructure solution. Please list only those accessories and software that the appliance cannot run without. These should strictly be listed under the "other accessories" column.	

Table E: Enterprise Backup and Replication Software

No.	Feature	Required Specification	Bidder's Proposed Specification
E.1	Data Replication Mode:	Continuous Data Replication from primary site to DR site	
E.2	Data Replication Time:	50-day Active Data Replication	
E.3	RPO	Less than 1 minute	
E.4	RTO	Less than 60 minutes	
E.5	Virtual Machine replication	Capable of replicating virtual machines to another storage device	
E.6	Workload Support:	Supports VMWare, Hyper-V, Nutanix AHV, Microsoft Windows and Linux workloads	
E.7	Encryption:	Supports Encryption of backed up data	
E.8	Application Support:	Support for Microsoft SQL Server, Oracle Database, Microsoft Exchange Server,	
E.9	Database Agents:	Agents for MS SQL Server and Oracle Database	
E.10	Cloud Support:	Support AWS, Azure, Office 365	
E.11	Storage Support:	Supports storage from HPE, Cisco, Lenovo, NetApp, IBM, Nutanix	
E.12	Offline Storage:	Supports offline storage	
E.13	Site Recovery:	Supports site recovery	
E.14	Bare Metal Recovery:	Supports bare metal recovery from any hardware	
E.15	Ransomware Protection:	Provides recovery from Ransomware attacks	
E.16	Snapshot Based Backups:	Supported	
E.17	VM Level backups:	Supported	
E.18	File Level Backup:	Supported	
E.19	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.	

E.20	Vendor Support:	Proactive Vendor Support for a period of 5 years	
E.21	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories and software that the appliance cannot run without. These should strictly be listed under the “other accessories” column.	

Table F: Dedicated Backup Server

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Proposed Specification</u>
F.1	Quantity of Servers:	1	
F.2	Server Form factor:	1U-2U Rack mountable	
F.3	Number of processor sockets:	At least 2	
F.4	Required processor:	One (1) Intel Xeon processor, at least 2.1GHz or higher	
F.5	Total number of cores per cluster:	8 cores	
F.6	Memory slots:	At least 16 DIMM slots	
F.7	Required Total Memory:	32GB RAM	
F.8	Required disk type:	SAS	
F.9	Total Usable Storage Space:	At least 2TB usable storage space	
F.10	Power Supplies:	Two (2) hot swappable power supplies	
F.11	Network Connectivity – RJ45:	At least two (2) 1GbE Adaptors	
F.12	Network Connectivity – SFP:	At least two (2) 10/20GB dual speed SFP ports	
F.13	iLO Management Port:	At least one (1) iLO Management Port	
F.14	USB Ports:	At least two (2) USB 3.0 ports	
F.15	Micro SD Card Slot:	At least one (1) Micro SD Card Slot	
F.16	VGA Port:	At least one (1) VGA port	
F.17	DVD-CD ROM Drive:	One (1) DVD/CD-ROM drive	
F.18	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.	
F.19	Vendor Support	Basic / Foundation Vendor Support with NBD parts exchange for a period of 5 years	
F.20	End-of-Support:	At Least 5 years from 1 st April 2022	
F.21	End-of-Life:	At least 10 years from 1 st April 2022	
F.22	Other Accessories	Any other accessories and software needed for the interfacing and operation of the server to other components of the Hyper Converged Infrastructure solution. Please list only those accessories and software that the appliance cannot run without. These should	

		strictly be listed under the “other accessories” column.	
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Table G: Local Backup Appliance

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Proposed Specification</u>
G.1	Form Factor:	Rack Mountable, Between 1U to 20U	
G.2	Storage Space Scalability:	From 60TeraBytes to 560TeraBytes raw disk space	
G.3	Total Raw Storage Space:	60 TeraBytes	
G.4	Disks Size and Type:	4TeraBytes SAS	
G.5	Number of Disk Drives:	15	
G.6	Device Interfaces (Fiber Channel):	4 x 8Gb Fibre Channel ports	
G.7	Device Interfaces (1Gb Ethernet):	4 x 1Gb Ethernet ports	
G.8	Device Interfaces (10Gb Ethernet):	4 x 10Gb Ethernet ports	
G.9	Deduplication feature:	Available	
G.10	Compression feature:	Available	
G.11	Encryption feature:	Available	
G.12	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.	
G.13	Vendor Support	Basic / Foundation Vendor Support with NBD parts exchange for a period of 5 years	
G.14	End-of-Support:	At Least 5 years from 1 st April 2022	
G.15	End-of-Life:	At least 10 years from 1 st April 2022	
G.16	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories and software that the appliance cannot run without. These should strictly be listed under the “other accessories” column.	

Table H: Remote Backup Appliance

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Proposed Specification</u>
H.1	Form Factor:	Rack Mountable, Between 1U to 20U	
H.2	Storage Space Scalability:	From 60TeraBytes to 560TeraBytes raw disk space	
H.3	Total Raw Storage Space:	60 TeraBytes	
H.4	Disks Size and Type:	4TeraBytes SAS	

H.5	Number of Disk Drives:	15	
H.6	Device Interfaces (Fiber Channel):	4 x 8Gb Fibre Channel ports	
H.7	Device Interfaces (1Gb Ethernet):	4 x 1Gb Ethernet ports	
H.8	Device Interfaces (10Gb Ethernet):	4 x 10Gb Ethernet ports	
H.9	Deduplication feature:	Available	
H.10	Compression feature:	Available	
H.11	Encryption feature:	Available	
H.12	Virtual Tape Library	Virtual Tape Library	
H.13	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.	
H.14	Vendor Support:	Basic / Foundation Vendor Support with NBD parts exchange for a period of 5 years	
H.15	End-of-Support:	At Least 5 years from 1 st April 2022	
H.16	End-of-Life:	At least 10 years from 1 st April 2022	
H.17	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories and software that the appliance cannot run without. These should strictly be listed under the "other accessories" column.	

Table I: Installation, configuration, data migration, training and post installation support and maintenance

No.	Feature	Required Specification	Bidder's Proposed Specification
I.1	Installation and Configuration:	Installation and Configuration of all supplied hardware and software.	
I.2	Migration of workloads:	Migration of workloads from the current Primary Site to the Hyper Converged Infrastructure. This includes Microsoft Hyper-V virtual machines and Oracle VM virtual machines. It also includes the migration of workloads from the current Disaster Recovery Infrastructure to the Hyper Converged Infrastructure.	
I.3	Training of three (3) administrators:	Training of 3 administrators on the operation and support of all the supplied hardware and software. Vendor professional training on Hyper Converged Infrastructure, Backup and Replication is preferred.	
I.4	Post Installation support and Maintenance:	Post installation support and maintenance by supplier for 3 years	

NOTE:

The bidder must state the specifications of their proposed solution against the BEC specification requirement to enable evaluators to make a meaningful comparison.

Features that can be checked during the evaluation of the tender shall be checked during that stage. For those that can only be verified after installation and the bidder indicates that they are supported, the BEC shall take the bidder's word and assume that these are supported with the intention to verify them after installation. For the bidder that is awarded the tender these features shall be checked and tested once the supply and installation has been done but prior to signing the acceptance certificate for the solution.

If during the pre-acceptance tests the bidder cannot provide proof that these features are available and working, then the solution **SHALL NOT BE ACCEPTED**. So, bidders must ensure that when they propose that features are available in their solution, they are sure that this is verifiable as it **SHALL** be checked.

TENDER NO. BEC ICT 002/22-23: THE SUPPLY, DELIVERY AND IMPLEMENTATION OF A PRIVATE CLOUD BASED ON HYPER CONVERGED INFRASTRUCTURE

- 1.5 The Procuring Organization's address for delivery of tender offers, tender and other identification details to be shown on each tender offer package are:

TENDER NO. BEC ICT 002/22-23: THE SUPPLY, DELIVERY AND IMPLEMENTATION OF A PRIVATE CLOUD SOLUTION BASED ON HYPER CONVERGED INFRASTRUCTURE

Tender Secretary, Botswana Examinations Council
Plot 54864, KT Motsete Road, Gaborone.

- 1.6 Bids should be submitted according to the Instructions to Bidders. Important points are repeated as follows:

- The bid document must be prepared in indelible ink. It shall contain no interlineations or overwriting, except as necessary to correct errors made by the bidder. Any such corrections must be initialed by the person or persons who sign the bid.
- All copies must be signed in ink by an authorised employee, agent or representative of the bidder.
- For each bid, the bidders shall prepare the number of copies indicated in the Instructions to bidders. The original bid should be marked ORIGINAL; all other copies should be marked COPY. If there are discrepancies between the original and any of the copies, the original will be assumed to be correct and shall bear the submission address.
- Bids must be submitted using the **one envelope system**

The original, four (4) copies and re-writable CDs/DVDs of the bids shall be placed in a separate and sealed envelope clearly marked – TENDER NO. BEC ICT 002/22-23: THE SUPPLY, DELIVERY AND IMPLEMENTATION OF A PRIVATE

CLOUD SOLUTION BASED ON HYPER CONVERGED INFRASTRUCTURE and shall bear the submission address.

- Bids must arrive no later than **10:00 am** (local time) on **Friday 22nd July 2022**. The sealed envelope should have the original, four (4) copies and a CD/DVD clearly marked;

TENDER No. BEC ICT 002/22-23: THE SUPPLY, DELIVERY AND IMPLEMENTATION OF A PRIVATE CLOUD SOLUTION BASED ON HYPER CONVERGED INFRASTRUCTURE

- Bids will be opened immediately, and bidders may be present if they wish. Bids received after the closing date and time will not be accepted. Email or Facsimile bids will not be accepted.

1.7 The closing time for submission of tender offers is: 10.00 am on **Friday 22nd July 2022**.

1.8 Telephonic, telegraphic, telex, email or facsimile tender offers will not be accepted.

1.9 The tender validity period is **120 days** from the closing date of the tender.

1.10 The time and location for opening of the tender offers is:

10:00 am on **Friday 22nd July 2022**

Location: Botswana Examinations Council
Plot 54864; KT Motsete Road; Gaborone.

1.11. The procedure for evaluation of the responsive tender offers is: Method 1: Least Cost Supplies Evaluation Method

The Evaluation Process

The Tender Evaluation Committee (TEC) will be constituted to evaluate the bids. The evaluation procedure to be adopted by the Evaluation Committee will be as follows:

- 1 In Stage 1 of the evaluation process the bids will be scrutinized against the Disqualification clause given in 1.12.
- 2 The qualifying bids after Stage 1 will go through to Stage 2 of the evaluation process as described in 1.13.
- 3 The bids of the short-listed bidders after Stage 2 of the evaluation process will be evaluated as stated in Stage 3 of the evaluation process as described in 1.14.
- 4 The project will be provisionally awarded to the lowest compliant bidder subject to successful negotiation of the contract as in 1.15.
- 5 The successful Bidder will sign the agreed contract document with BEC prior to commencement of the project.
- 6 The successful bidder shall deliver the equipment to Botswana Examinations Council that conform to specifications.

Notes

- Subject to authorization by BEC Tender Committee, further information may be requested from the bidders during evaluation. Any such request will be made in writing to the bidder's nominated representative as declared in the Form of Response. Any such correspondence will be for purposes of clarification only and will in no way be indicative of any preference towards any bidder or bid.
- All important information required for the project shall be included in the bid, so that at contract negotiation stage there are no major issues that could call for the change of award.
- Please include Table of Contents in your bid

1.12 Disqualification at Stage 1

A bidder whose technical bid does not meet the following requirements will be disqualified during the first scrutiny at Stage 1. In the case of a consortium or joint venture or partnership, or sub-contractor or any form of companies working together the companies shall be evaluated individually for compliance with the listed requirements. i.e., individual companies must meet the compliance criteria for the consortium or joint venture or partnership, or sub-contractor or any form of companies working together to proceed to stage 2. **Note:** Joint Ventures, Consortium or partnership, or sub-contractor or any form of companies working together shall only be accepted where such is formed by 100% citizen owned companies.

Bidders must submit all of the following.

- PPADB Registration Certificate under:
 - Code 120 ICT Technical Support, Sub-Code 01: Systems Development and Maintenance or Sub-Code 02: Server Management and Maintenance Services or Sub-Code 03: Data Centre Maintenance and Facilities: **OR**
 - Code 203: Electrical, Electronic, Mechanical, Fire and ICT Supplies, Sub-Code 01: Electrical and Electronic Equipment, Spares and Accessories (includes ICT, photographic equipment, and others) (registration will be verified on-line).
- A Valid Copy of a Tax Clearance Certificate (Provide Certificate Number and Pin Number for on-line verified).
- Completed Form of Declaration for Tendering Purposes.
- Company Extract from Companies and Intellectual Property Authority (CIPA) Showing the Company Shareholders and Directors, accompanied by Identity Documents of both Directors and Shareholders.
 - Publicly listed companies may submit certificates of their controlling shareholders only.
 - NB: Where the shareholder is a company, the individual shareholders of the company in question must be submitted. e.g., if ABC (Pty) Ltd submits a tender and one of its shareholders is EFG (Pty) Ltd, the shareholders in EFG should be submitted and so on until the shareholders submitted bears the names of individuals.
- A copy of a letter or certificate from the vendor showing that the bidder is a vendor partner which is authorised to **sell, support and maintain** the equipment. This can also be a certificate from the vendor showing that the bidder is a dealer for the Original Equipment Manufacturer.
- A copy of a letter or certificate from the vendor of the Hyper Converged Solution showing that the bidder is a vendor partner who is authorized to **sell** the Hyper Converged Infrastructure Solution.
- Completed and Signed Form of Authority of Signatory.
- Completed and Signed Form of Offer and Acceptance.

Should a bidder fail to submit items a) to g) on the first instance, they will be requested to resubmit the missing item(s) through email, and they will be given a minimum of 2 days or a maximum of 5 days to submit. Should the bidder fail to submit within the required time, they will be disqualified from further evaluation.

Failure to submit the Completed and Signed Form of Offer and Acceptance, (h) above, on the first instance, will lead to outright disqualification.

1.13 Evaluation of Bids at Stage 2 (Technical Evaluation)

For each of tables A to I, a corresponding technical evaluation criteria table, i.e. tables A1 to I1, below, shall be developed. These tables shall be used by the evaluation committee to determine if the bidder's proposed solution meets the required specifications. Bidders must fully comply with each of the requirements by stating their proposed specifications. This means that bidder specifications must be the same or better than the required specifications as described by BEC. Consortiums /Joint Ventures/Partnership/Sub-Contracting/any form of working together will be assessed as one (not individually). Failure to meet one or more evaluation requirements will lead to the bidder not proceeding to financial evaluation.

So, for each requirement in tables A – I, bidders are required to state their specifications offer in full, failing which they will be disqualified. Stating words such as “comply” or any related words shall not be accepted.

Table A1: Technical Evaluation Criteria for Hyper Converged Infrastructure Solution for Primary Site

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Specification</u>	<u>Proposed</u>	<u>Compliant (Yes/No)</u>
A1.1	Quantity of HCI Nodes:	5			
A1.2	Vendor of Hyper Converged Infrastructure Virtualization Software:	Name the vendor here			
A1.3	Position of proposed Hyper Converged Infrastructure Software in the Gartner Magic Quadrant as of April 2022:	Leaders			
A1.4	Minimum Number of VMs supported	50			
A1.5	Hypervisor:	Name the proposed Hypervisor here			
A1.6	Native/Hypervisor based replication:	Supported			
A1.7	VM Live migration capability:	Supported			
A1.8	Dynamic Allocation of computing and storage capacity across aggregated hardware resources:	Supported			
A1.9	I/O Striping Support:	Must support I/O striping across all hyper converged nodes for each individual virtual machine			
A1.10	Replication Methods Support:	Must support the RF=2 and RF=3 Replication methods			
A1.11	Snapshot Support:	Must support instant space optimized point-in-time snapshots. Should allow taking snapshots of individual virtual machines to enable to revert the VM to an older state			
A1.12	HCI Cluster Scalability:	Support of up to 20 nodes per cluster			
A1.13	Vendor of Hyper Converged Infrastructure solution hardware:	Name the proposed hardware vendor here			
A1.14	Form factor of HCI nodes:	2U – 10U Rack mountable			
A1.15	Number of processor sockets per HCI node:	4			

A1.16	Required processors quantity and type on each HCI node:	Two (2) Intel Xeon processors, at least 2.5GHz or higher		
A1.17	Number of cores per processor:	At least 12 cores		
A1.18	Memory slots on each HCI node	At least 24 DIMM slots		
A1.19	Required Total Memory on each HCI node:	At least 256GB RAM		
A.1.20	Required disk type on each node:	Solid State Drive (SSD) only		
A1.21	Total No. of SSD Slots per Node:	At least 20		
A1.22	Total Usable Storage Space on each HCI node:	At least 40TB usable storage space		
A1.23	Power Supplies per HCI node:	Two (2) hot swappable power supplies		
A1.24	Cooling Fans per HCI node:	Two (2) hot swappable cooling fans		
A1.25	Network Connectivity – RJ45 per HCI node:	At least two (2) 1Gbps network interface (RJ45) ports		
A1.26	Network Connectivity – SFP per HCI node:	At least two (2) 10/20GB dual speed SFP ports		
A1.27	ILO Management Port:	At least one (1) iLO Management Port		
A1.28	USB Ports per Node:	At least one (1) USB 3.0 port per node		
A1.29	Display Ports per Node:	At least one (1) HDMI port or one (1) VGA port		
A1.30	Management:	Remote monitoring and management of hypervisor, hardware and VMs from a single console supported.		
A1.31	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.		
A1.32	Vendor Support	Proactive Vendor Support with NBD parts replacement for a period of 5 years . This includes support for the virtualization software.		
A1.33	End-of-Support:	At Least 5 years from 1 st April 2022. Please provide vendor website link where this information can be checked. Or provide a document from the vendor showing this information.		
A1.34	End-of-Life:	At least 10 years from 1 st April 2022. Please provide vendor website		

		link where this information can be checked. Or provide a document from the vendor showing this information.		
A1.35	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories that the appliance cannot run without. These should strictly be listed under the "other accessories" column.		

Table B1: Technical Evaluation Criteria for Hyper Converged Infrastructure Solution for Disaster Recovery Site

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Specification</u>	<u>Proposed</u>	<u>Compliant (Yes/No)</u>
B1.1	Quantity of HCI Nodes:	3			
B1.2	Vendor of Hyper Converged Infrastructure Virtualization Software:	Name the vendor here			
B1.3	Position of proposed Hyper Converged Infrastructure Software in the Gartner Magic Quadrant as of April 2022:	Leaders			
B1.4	Minimum Number of VMs supported	50			
B1.5	Hypervisor:	Name the proposed Hypervisor here			
B1.6	Native/Hypervisor based replication:	Supported			
B1.7	VM Live migration capability:	Supported			
B1.8	Dynamic Allocation of computing and storage capacity across aggregated hardware resources:	Supported			
B1.9	I/O Striping Support:	Must support I/O striping across all hyper converged nodes for each individual virtual machine			
B1.10	Replication Methods Support:	Must support the RF=2 and RF=3 Replication methods			
B1.11	Snapshot Support:	Must support instant space optimized point-in-time snapshots. Should allow taking snapshots of individual virtual machines to enable to revert the VM to an older state			
B1.12	HCI Cluster Scalability:	Support of up to 20 nodes per cluster			
B1.13	Vendor of Hyper Converged Infrastructure solution hardware:	Name the proposed hardware vendor here			
B1.14	Form factor of HCI nodes:	2U – 10U Rack mountable			
B1.15	Number of processor sockets per HCI node:	4			

B1.16	Required processors quantity and type on each HCI node:	Two (2) Intel Xeon processors, at least 2.5GHz or higher		
B1.17	Number of cores per processor:	At least 12 cores		
B1.18	Memory slots on each HCI node	At least 24 DIMM slots		
B1.19	Required Total Memory on each HCI node:	At least 256GB RAM		
B1.20	Required disk type on each node:	Solid State Drive (SSD) only		
B1.21	Total No. of SSD Slots per Node:	At least 20		
B1.22	Total Usable Storage Space on each HCI node:	At least 40TB usable storage space		
B1.23	Power Supplies per HCI node:	Two (2) hot swappable power supplies		
B1.24	Cooling Fans per HCI node:	Two (2) hot swappable cooling fans		
B1.25	Network Connectivity – RJ45 per HCI node:	At least two (2) 1Gbps network interface (RJ45) ports		
B1.26	Network Connectivity – SFP per HCI node:	At least two (2) 10/20GB dual speed SFP ports		
B1.27	ILO Management Port:	At least one (1) iLO Management Port		
B1.28	USB Ports per Node:	At least one (1) USB 3.0 port per node		
B1.29	Display Ports per Node:	At least one (1) HDMI port or one (1) VGA port		
B1.30	Management:	Remote monitoring and management of hypervisor, hardware and VMs from a single console supported.		
B1.31	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.		
B1.32	Vendor Support	Proactive Vendor Support with NBD parts replacement for a period of 5 years . This includes support for the virtualization software.		
B1.33	End-of-Support:	At Least 5 years from 1 st April 2022. Please provide vendor website link where this information can be checked. Or provide a document from the vendor showing this information.		
B1.34	End-of-Life:	At least 10 years from 1 st April 2022. Please provide vendor website		

		link where this information can be checked. Or provide a document from the vendor showing this information.		
B1.35	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories that the appliance cannot run without. These should strictly be listed under the "other accessories" column.		

Table C1: Technical Evaluation Criteria for Private Cloud Solution

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Proposed Specification</u>	<u>Compliant (Yes/No)</u>
C1.1	Virtual Machine/Virtual Private Server Creation:	Console for users to self-create Virtual Machines or Virtual Private Servers within a few minutes by specifying Number of Virtual CPUs, RAM, Storage space and Operating System.		
C1.2	Automation of Virtual Machine Provisioning	Ability for all IT staff, not a single administrator to automatically provision virtual machines for themselves. These virtual machines should be automatically installed required available Operating Systems.		
C1.3	Networking – Private IPs:	Configuration of private IPs for internal networking of the private cloud. These IPs shall be provided by BEC		
C1.4	Networking – Public IPs:	Configuration of public IPs, for users and for administrators. These IPs shall be provided by BEC		
C1.5	Subnet Segregation:	Segregate subnet for data backups and public access to BEC application systems.		
C1.6	External Network Bandwidth:	Bandwidth for external network must be at least 20Mbps		
C1.7	Administration Console/Dashboard:	Provision of an administrative interface for better visibility to all resources, virtual machines, templates to all users of the private cloud		
C1.8	Public Cloud Integration Supported:	Yes		
C1.9	Portability of Licenses between Private Cloud and Public Cloud	Full portability of licenses between Private cloud and public clouds such as Microsoft Azure and AWS		
C1.10	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.		
C1.11	Other Accessories	Any other accessories and software needed for the interfacing and operation of the		

		appliance. Please list only those accessories and software that the appliance cannot run without. These should strictly be listed under the "other accessories" column.		
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Table D1: Technical Evaluation Criteria for Management Servers

No.	Feature	Required Specification	Bidder's Proposed Specification	Compliant (Yes/No)
D1.1	Quantity of Servers:	2		
D1.2	Server Form factor:	1U-2U Rack mountable		
D1.3	Number of processor sockets:	At least 2		
D1.4	Required processor:	One (1) Intel Xeon processor, at least 2.1GHz or higher		
D1.5	Total number of cores per cluster:	8 cores		
D1.6	Memory slots:	At least 16 DIMM slots		
D1.7	Required Total Memory:	32GB RAM		
D1.8	Required disk type:	SAS		
D1.9	Total Usable Storage Space:	At least 2TB usable storage space		
D1.10	Power Supplies:	Two (2) hot swappable power supplies		
D1.11	Network Connectivity – RJ45:	At least two (2) 1GbE Adaptors		
D1.12	Network Connectivity – SFP:	At least two (2) 10/20GB dual speed SFP ports		
D1.13	ILO Management Port:	At least one (1) iLO Management Port		
D1.14	USB Ports:	At least two (2) USB 3.0 ports		
D1.15	Micro SD Card Slot:	At least one (1) Micro SD Card Slot		
D1.16	VGA Port:	At least one (1) VGA port		
D1.17	DVD-CD ROM Drive:	One (1) DVD/CD-ROM drive		
D1.18	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.		
D1.19	Vendor Support	Basic / Foundation Vendor Support with NBD parts exchange for a period of 5 years		
D1.20	End-of-Support:	At Least 5 years from 1 st April 2022		
D1.21	End-of-Life:	At least 10 years from 1 st April 2022		
D1.22	Other Accessories	Any other accessories and software needed for the interfacing and operation of the server to other components of the Hyper Converged Infrastructure solution. Please list only those accessories and software that the appliance cannot run without. These should		

		strictly be listed under the "other accessories" column.		
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Table E1: Technical Evaluation Criteria for Enterprise Backup and Replication Software

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Specification</u>	<u>Proposed</u>	<u>Compliant (Yes/No)</u>
E1.1	Data Replication Mode:	Continuous Data Replication from primary site to DR site			
E1.2	Data Replication Time:	50-day Active Data Replication			
E1.3	RPO	Less than 1 minute			
E1.4	RTO	Less than 60 minutes			
E1.5	Virtual Machine replication	Capable of replicating virtual machines to another storage device			
E1.6	Workload Support:	Supports VMWare, Hyper-V, Nutanix AHV, Microsoft Windows and Linux workloads			
E1.7	Encryption:	Supports Encryption of backed up data			
E1.8	Application Support:	Support for Microsoft SQL Server, Oracle Database, Microsoft Exchange Server,			
E1.9	Database Agents:	Agents for MS SQL Server and Oracle Database			
E1.10	Cloud Support:	Support AWS, Azure, Office 365			
E1.11	Storage Support:	Supports storage from HPE, Cisco, Lenovo, NetApp, IBM, Nutanix			
E1.12	Offline Storage:	Supports offline storage			
E1.13	Site Recovery:	Supports site recovery			
E1.14	Bare Metal Recovery:	Supports bare metal recovery from any hardware			
E1.15	Ransomware Protection:	Provides recovery from Ransomware attacks			
E1.16	Snapshot Based Backups:	Supported			
E1.17	VM Level backups:	Supported			
E1.18	File Level Backup:	Supported			
E1.19	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.			
E1.20	Vendor Support:	Proactive Vendor Support for a period of 5 years			
E1.21	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories and software that the appliance cannot run without. These should strictly be listed under the			

		"other column.	accessories"		
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Table F1: Technical Evaluation Criteria for Dedicated Backup Server

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Specification</u>	<u>Proposed</u>	<u>Compliant (Yes/No)</u>
F1.1	Quantity of Servers:	1			
F1.2	Server Form factor:	1U-2U Rack mountable			
F1.3	Number of processor sockets:	At least 2			
F1.4	Required processor:	One (1) Intel Xeon processor, at least 2.1GHz or higher			
F1.5	Total number of cores per cluster:	8 cores			
F1.6	Memory slots:	At least 16 DIMM slots			
F1.7	Required Total Memory:	32GB RAM			
F1.8	Required disk type:	SAS			
F1.9	Total Usable Storage Space:	At least 2TB usable storage space			
F1.10	Power Supplies:	Two (2) hot swappable power supplies			
F1.11	Network Connectivity – RJ45:	At least two (2) 1GbE Adaptors			
F1.12	Network Connectivity – SFP:	At least two (2) 10/20GB dual speed SFP ports			
F1.13	ILO Management Port:	At least one (1) iLO Management Port			
F1.14	USB Ports:	At least two (2) USB 3.0 ports			
F1.15	Micro SD Card Slot:	At least one (1) Micro SD Card Slot			
F1.16	VGA Port:	At least one (1) VGA port			
F1.17	DVD-CD ROM Drive:	One (1) DVD/CD-ROM drive			
F1.18	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.			
F1.19	Vendor Support	Basic / Foundation Vendor Support with NBD parts exchange for a period of 5 years			
F1.20	End-of-Support:	At Least 5 years from 1 st April 2022			
F1.21	End-of-Life:	At least 10 years from 1 st April 2022			
F1.22	Other Accessories	Any other accessories and software needed for the interfacing and operation of the server to other components of the Hyper Converged Infrastructure solution. Please list only			

		those accessories and software that the appliance cannot run without. These should strictly be listed under the "other accessories" column.		
--	--	---	--	--

Table G1: Technical Evaluation Criteria for Local Backup Appliance

No.	Feature	Required Specification	Bidder's Proposed Specification	Compliant (Yes/No)
G1.1	Form Factor:	Rack Mountable, Between 1U to 20U		
G1.2	Storage Space Scalability:	From 60TeraBytes to 560TeraBytes raw disk space		
G1.3	Total Raw Storage Space:	60 TeraBytes		
G1.4	Disks Size and Type:	4TeraBytes SAS		
G1.5	Number of Disk Drives:	15		
G1.6	Device Interfaces (Fiber Channel):	4 x 8Gb Fibre Channel ports		
G1.7	Device Interfaces (1Gb Ethernet):	4 x 1Gb Ethernet ports		
G1.8	Device Interfaces (10Gb Ethernet):	4 x 10Gb Ethernet ports		
G1.9	Deduplication feature:	Available		
G1.10	Compression feature:	Available		
G1.11	Encryption feature:	Available		
G1.12	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.		
G1.13	Vendor Support	Basic / Foundation Vendor Support with NBD parts exchange for a period of 5 years		
G1.14	End-of-Support:	At Least 5 years from 1 st April 2022		
G1.15	End-of-Life:	At least 10 years from 1 st April 2022		
G1.16	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories and software that the appliance cannot run without. These should strictly be listed under the "other accessories" column.		

Table H1: Technical Evaluation Criteria for Remote Backup Appliance

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Specification</u>	<u>Proposed</u>	<u>Compliant (Yes/No)</u>
H1.1	Form Factor:	Rack Mountable, Between 1U to 20U			
H1.2	Storage Space Scalability:	From 60TeraBytes to 560TeraBytes raw disk space			
H1.3	Total Raw Storage Space:	60 TeraBytes			
H1.4	Disks Size and Type:	4TeraBytes SAS			
H1.5	Number of Disk Drives:	15			
H1.6	Device Interfaces (Fiber Channel):	4 x 8Gb Fibre Channel ports			
H1.7	Device Interfaces (1Gb Ethernet):	4 x 1Gb Ethernet ports			
H1.8	Device Interfaces (10Gb Ethernet):	4 x 10Gb Ethernet ports			
H1.9	Deduplication feature:	Available			
H1.10	Compression feature:	Available			
H1.11	Encryption feature:	Available			
H1.12	Virtual Tape Library	Virtual Tape Library			
H1.13	Licenses and Warranty:	Supply of all perpetual licenses and renewable licenses required for a period of 5 years.			
H1.14	Vendor Support:	Basic / Foundation Vendor Support with NBD parts exchange for a period of 5 years			
H1.15	End-of-Support:	At Least 5 years from 1 st April 2022			
H1.16	End-of-Life:	At least 10 years from 1 st April 2022			
H1.17	Other Accessories	Any other accessories and software needed for the interfacing and operation of the appliance. Please list only those accessories and software that the appliance cannot run without. These should strictly be listed under the "other accessories" column.			

Table I1: Technical Evaluation Criteria for Installation, configuration, data migration, training and post installation support and maintenance

<u>No.</u>	<u>Feature</u>	<u>Required Specification</u>	<u>Bidder's Proposed Specification</u>	<u>Compliant (Yes/No)</u>
I1.1	Installation and Configuration:	Installation and Configuration of all supplied hardware and software.		
I1.2	Migration of workloads:	Migration of workloads from the current Primary Site to the Hyper Converged Infrastructure. This includes Microsoft Hyper-V virtual machines and Oracle VM virtual machines. It also includes the migration of workloads from the current Disaster Recovery Infrastructure to the Hyper Converged Infrastructure.		
I1.3	Training of three (3) administrators:	Training of 3 administrators on the operation and support of all the supplied hardware and software. Vendor professional training on Hyper Converged Infrastructure, Backup and Replication is preferred.		
I1.4	Post Installation support and Maintenance:	Post installation support and maintenance by supplier for 3 years		

Once each of tables A1 – I1 have been evaluated, their results shall be compiled in a technical evaluation summary table , table K, below. For a bidder to pass the technical evaluation stage, it must comply with each of the criteria items in Table K below, i.e it must attain an Overall Technical Evaluation Result of “Compliant” . Any bidder that is found to be non-compliant with just a single technical evaluation criterion in this table shall be disqualified and their bid shall not undergo any further evaluation.

Table K: Technical Evaluation Summary

No.	Evaluation Criteria	Compliant (Yes/No)
A	Hyper Converged Infrastructure Solution for Primary Site	
B	Hyper Converged Infrastructure Solution for Disaster Recovery Site	
C	Private Cloud Solution	
D	Management Servers for Primary Site and Disaster Recovery Site:	
E	Management Servers for Primary Site and Disaster Recovery Site	
F	Enterprise Backup and Replication Solution	
G	Local Backup Appliance	
H	Remote Backup Appliance	
I	Installation, Configuration, Data Migration, Training and Post Installation Support and Maintenance	
OVERALL TECHNICAL EVALUATION RESULT:		

1.14 Evaluation of Bids at Stage 3

Cost Evaluation and Comparison

Note: If there are no charges for a particular item the bidder shall indicate Not Applicable or N / A

Bidders should price in ink, bidders that do not comply with pricing format will be eliminated from evaluation.

Only bids that are fully technically compliant shall undergo cost evaluation.

Arithmetic errors shall be corrected, and bids will be converted to a common currency. Should there be discrepancy between the Unit Price and the Total Price, the Unit Price shall be used. Should there be discrepancy between the amount in figures and the amount in words, the amount in words will be used.

Bids will be ranked in order of their prices after correction of any arithmetic errors.

1.16 Basis of Award

The lowest compliant bidder, after applying all the policies, will be recommended for the award to BEC Tender Committee subject to an agreed contract. If the contract negotiations fail, then the next preferred supplier will be engaged for contract negotiations and recommended for the award.

The successful bidder shall provide a Private Cloud Solution based on Hyper Converged Infrastructure immediately following the issuance of a purchase order.

TENDER RETURNABLE DOCUMENTS	LIST OF RETURNABLE DOCUMENTS Volume 2
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The bidder must complete the following returnable documents:

1. Returnable Documents required for tender evaluation purposes

- Certificate for authority of signatory
- Record of addenda to tender documents
- Detailed Response to Requirements specified in the CONTRACT PART 3
- Response form
- Quality plan
- Experience of the bidder
- Risk management plan
- All certified copies of documents and conditions specified in (1.3)
- Form of Declaration For Tendering Purposes

2. Other Documents required for tender evaluation purposes

- Copy of a Tax Clearance Certificate for Botswana Registered Companies or exemption certificate thereof from BURS.
- PPADB Registration Certificate.
- Certified copies of forms from CIPA showing Shareholders.
- Certified copies of Share Certificates.
- Certified copies of forms from CIPA showing list of Directors.

3. Returnable Documents that will be incorporated into the contract

- Response form.
- Quality plan.
- Detailed Response to all other Requirements specified in the contract part 3.
- Form of Offer & Acceptance.
- Curriculum vitae of key personnel.
- Management plan.
- Form of Declaration by Directors & Shareholders.

Parts of each tender offer communicated on paper shall be submitted as an original, plus four (4) duplicate copies and 1 re-writable CD/DVD/. Copy must contain the following RESPONSE FORM

Bidder's Name	
Company Registration Number	
Vat Number (if applicable)	
Country of Registration	
Year of Establishment	
Physical Address	
Postal Address (if different)	
Telephone Number	
Mobile Number	
Fax Number	
Email and URL	
Contact Address in Botswana (If applicable)	
Project Title	
Tender No.	
Designated Authorised Representative for this Project	Name: Position: Qualifications: Tel: Fax: Email:
Project Referees (See CONTRACT PART 3, Scope of Work, 8.1.5)	1 2 3
Signed: Bidder's Authorised Representative	

<p>TENDER RETURNABLE DOCUMENTS</p>	<p>TENDER SCHEDULES CERTIFICATE OF AUTHORITY OF SIGNATORY</p>
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Indicate the status of the bidder by ticking the appropriate box hereunder. The bidder must complete the certificate set out below for the relevant category.

A COMPANY	B PARTNERSHIP	C JOINT VENTURE	D SOLE PROPRIETOR

A. Certificate for company

I, _____, chairperson of the board of directors of _____ hereby confirm that by resolution of the board taken on _____ 20_____, Mr/Ms _____, acting in the capacity of _____ was authorised to sign all documents in connection with this tender offer and any contract resulting from it on behalf of the company.

As witnesses:-

1. _____	_____
	Chairman
2. _____	_____
	Date

B. Certificate for Partnership

We, the undersigned, being the key partners in the business trading as _____
_____ hereby authorise Mr/ Ms _____ acting in
the capacity of _____ to sign all documents in
connection with the tender offer for Contract _____
and any contract resulting from it on our behalf.

NAME	ADDRESS	SIGNATURE	DATE

NOTE: This certificate is to be completed and signed by all of the partners. Attach additional pages if more space is required.

C. Certificate for Joint Venture

We, the undersigned, are submitting this tender offer in Joint Venture and hereby
authorise Mr/Ms _____ an authorised
signatory of the company _____, acting in the
capacity of lead partner, to sign all documents in connection with the tender offer for
Contract _____ and any contract resulting from it on our behalf.

This authorisation is evidenced by the attached power of attorney signed by legally
authorised signatories of all the partners to the Joint Venture. Furthermore, we attach
to this Schedule a copy of the joint venture agreement which incorporates a statement
that all partners are liable jointly and severally for the execution of the contract and that
the lead partner is authorised to incur liabilities, receive instructions and payments and
be responsible for the entire execution of the contract for and on behalf of any and all
the partners.

NAME OF FIRM	ADDRESS	AUTHORISING SIGNATURE, NAME & CAPACITY
<i>Lead partner</i>		

D. Certificate for sole proprietor.

I, _____, hereby confirm that I am the sole owner of the business trading as _____.

As witnesses: -

1. _____

Signature: Sole owner

2. _____

Date

TENDER RETURNABLE DOCUMENTS	TENDER SCHEDULES RECORD OF ADDENDA TO TENDER DOCUMENTS
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We confirm that the following communications received from the Procuring Organisation before the submission of this tender offer, amending the tender documents, have been taken into account in this tender offer:

	Date	Title or Details
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

Attach additional pages if more space is required.

Signed

Date

Name

Position

Tenderer

TENDER RETURNABLE DOCUMENTS	TENDER SCHEDULES QUALITY PLAN
--	--

TENDER NO. BEC ICT 002/22-23: THE SUPPLY, DELIVERY AND IMPLEMENTATION OF A PRIVATE CLOUD SOLUTION BASED ON HYPER CONVERGED INFRASTRUCTURE

Note to bidders:

Please provide details of your quality plan here. Please describe the management arrangements for the work in this contract. You are requested to include:

1. An organization chart showing on-site and off-site management personnel
2. Details of the location (and functions) of offices from which the work will be managed.
3. An explanation of how you propose to allocate adequate resources for the duration of the project.

TENDER RETURNABLE DOCUMENTS	TENDER SCHEDULES CURRICULUM VITAE OF KEY PERSONNEL
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Name:	Date of Birth:
Profession:	Nationality:
Current Position:	Years with the firm:
<u>Qualification and Experience:</u>	
<u>Education:</u>	
Professional Membership:	
<u>Experience Record:</u>	
<u>Languages:</u>	
Certification:	
<p>I, the undersigned, certify that to the best of my knowledge and belief, this data correctly describes me, my qualifications and my experience.</p>	
<p>_____</p> <p><i>[Signature of authorized representative of the Tenderer]</i></p>	<p>Date: _____</p>

TENDER RETURNABLE DOCUMENTS	TENDER SCHEDULES QUALITY PLAN
--	--

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The following is a statement of similar works successfully executed by myself/ ourselves:

Employer, contact person and telephone number.	Description of contract	Value of work	Date completed
Signed			
		Date	
Name		Position	
Bidder			

TENDER RETURNABLE DOCUMENTS	TENDER SCHEDULES MANAGEMENT PLAN
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Note to tenderers: Please describe the management arrangements for the work in this contract. You are requested to include:

4. An Organisation chart showing on-site and off-site management personnel
5. Details of the location (and functions) of offices from which the work will be managed.
6. An explanation of how you propose to allocate adequate resources for the duration of the project and subsequent maintenance periods.

Summary of items attached to this schedule:

Attach additional pages as required.

Signed

Date

Name

Position

Tenderer

Republic of Botswana	TENDER RETURNABLE DOCUMENT	DECLARATION FORM FOR TENDERING PURPOSES
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Declaration to establish that Directors, shareholders, partners, members have not participated through any other bid for the same tender.

PART A

I, _____ (full name), in my capacity as..... (state position in Entity)
 hereby declare that on my behalf, and on behalf of the owners, partners / directors/ shareholders /administrators and/or Other (Please specify)

of:
 (name of Entity)

of:

 (Postal/physical address)

that, in connection with the enclosed tender,

All information contained herein is true and not misleading, and it is to the best of my knowledge factual and binding on the Entity and/or its Representatives. I state that the (State Name of Entity) and/or its representatives confirm that they have not, through other entities, participated in the same tender and offer the same products in response to the same items.

NOTE THAT: In the case of competing franchises, the franchises may bid for the same item but with different products. Item means the commodity required by the procuring entity indicated in the ITT. Product means the commodity offered by the bidder.

I declare and confirm that the Entity and/or its Representatives have in fact not participated in the same tender and offered the same products in response to the same items, through any other registered company or other entity. I hereby provide a current list of Directors/ Administrators/ Partners/ Members and/or Shareholders for the Company/Partnership/ Society/Joint Venture/ Private Foundation/Statutory Body and/or other (Please specify).....

	DIRECTORS/MEMBERS/ PARTNERS NAME and /OR Other (Please Specify).....	CAPACITY IN ENTITY	NATIONALITY	PERCENTAGE OF SHAREHOLDING
1				
2				
3				
4				
5				

	SHAREHOLDERS NAME	NATIONALITY	PERCENTAGE OF SHAREHOLDING
1			
2			
3			
4			
5			
6			
7			

If more space is required attach additional sheet. Note that Public companies should state which stock exchange the company is listed under.

I further acknowledge that should any of the directors, partners, and shareholders, members/administrators */(others please specify)* be found to be associated in a similar or other manner in another company/entity, participating in this tender and offering the same products in response to the same items, this shall disqualify this Company/Partnership/ *Society*/Joint Venture/ Private Foundation/Statutory Body, and whichever company or other entity the said director/partner/shareholder/member and/or administrator is consequently involved in.

I further acknowledge that should the Company /Partnership/ *Society*/Joint Venture/ Private Foundation/ Statutory Body or any of its affiliates or subsidiaries be found to have participated in the same tender and offered the same products in response to the same items, the said Company/Partnership/ *Society*/Joint Venture/ Private Foundation/Statutory Body/*(others please specify)* and its affiliates and/or subsidiaries shall be disqualified.

The Company/Partnership/ *Society*/Joint Venture/ Private Foundation/ Statutory Body/*(others please specify)*, through its agents, employees or directors has not illegally communicated with any member of the procuring department or the Public Procurement and Asset Disposal Board, except as may be permitted in the relevant “instructions to tenderers” or by law.

The Company/Partnership/ *Society*/Joint Venture/ Private Foundation/Statutory Body/*(others please specify)*, through its agents, employees, partners, members, administrators and/or directors has not paid or offered to pay any consideration, favor or promise to any member of the procuring department or any person employed by or associated with Public Procurement and Asset Disposal Board (PPADB) or its Committees.

I declare that this tender is submitted by us in our own right, and we have not colluded in any way with any other /potential tenderer in the production and submission of this tender other than in the establishment of a joint venture or sub-contractor arrangement as fully and correctly declared in the tender.

I acknowledge that if after the award of this tender any of these declarations are found to be false then any contract(s) between ourselves and the procuring department and/or PPADB shall be terminated forthwith, and we may be barred from future tendering for government services and liable to possible prosecution.

I confirm that our entity has undertaken not to collude to withdraw from a tender award, only for the reason that an unsuccessful bidder be awarded the tender. I confirm further that the entity

has undertaken not to engage in frivolous complaints and litigation that frustrates project implementation.

SIGNED: NAME:

DATED:.....

.....

Entity

Stamp

PART B

1. Declaration to establish Eligibility for Reservation and Price Preferences for 100% Citizen Owned Contractor / Companies and other Entities.
2. The declaration shall be signed by all Businesses tendering for reserved contracts and contracts subject to preferences, as a condition of each tender.
3. The 100% citizenship requirements for shareholders, etc. contained therein shall not withstand any previous consents and practice, be pre-condition for the award of any reserved tender.

Definition

4. The following definitions shall apply to this declaration:

100% Citizen Owned Contractor / Company: a natural person or an incorporated company wholly owned and controlled by persons who are citizens of Botswana.

Control: the possession and exercise of legal authority and power to manage the assets, goodwill and daily operations of a business and the active and continuous exercise of managerial and financial authority and power in determining the policies and directing the operations of the business.

Net Amount: the financial value of the Contract at the time of the award of the Contract, exclusive of sales tax which the law requires the Employer to pay to the Contractor.

Owned: Having all the customary incidents of ownership, including the right of disposition, and sharing in all the risks and profits commensurate with the degree of ownership interest or shareholding as demonstrated by an examination of the substance as well as the form of ownership arrangements

5. The company operates banking and savings accounts; the only authorised signatories are:

i.
.....
(Bank Name and Name of signatory) (Omang No. /Passport)

ii.
.....
(Bank Name and Name of signatory) (Omang No. /Passport)

ii.
.....
(Bank Name and Name of signatory) (Omang No. /Passport)

iv.
.....
(Bank Name and Name of signatory) (Omang No. /Passport)

6. Undertakings

The Tenderer confirms that it is a 100% Citizen owned contractor/company and undertakes to remain a Citizen Contractor for the duration of the Contract. The Tenderer further undertakes not to subcontract more than 25% of the Net Amount to non-Citizen Contractors in the performance of the Contract.

7. Sanctions relating to reserved treatment

Any changes in Ownership or Control which violate the definition of a Citizen Contractor or the subcontracting of more than 25% of the Net Amount of the Contract to non-Citizen Contractors shall be sufficient reason for the Procuring Department to terminate the Contract.

8. All the shareholders of(Name of company) have read this declaration and agree to its contents.

- a) All the shareholders hereby give consent verification of the information provided above and understand that this may include but not limited to the verification of assets, liabilities, accounts, bonds and undertake to notify the competent authorities of any change to the information provided in this Declaration within seven days of such occurrence.
- b) I understand and declare that each matter here deposited to is essential for the tender validity of (Name of company)'s

NB: The Procuring Entity reserves the right to confirm the authenticity of the information provided above.

THUS SIGNED AND SWORN TO BEFORE ME COMMISSIONER OF OATHS AT _____

ON THIS _____ DAY OF _____ 20____, AT ____AM / PM, THE DEPONENT HAVING

ACKNOWLEDGED THAT HE KNOWS AND UNDERSTANDS THE CONTENTS OF THIS DECLARATION AND THAT IT IS BINDING ON HIS CONSCIENCE.

COMMISSIONER OF OATHS

CAPACITY:

LOCAL PROCUREMENT REGISTRATION CERTIFICATE

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Indicate the status of the tenderer by ticking the appropriate box hereunder. The tenderer must complete the certificate set out below for the relevant category.

A WOMAN	B YOUTH	C PEOPLE WITH DISABILITY	D RURAL SETTING	E EMPLOYMENT

A. B. C. Certificate for businesses owned by WOMAN/ YOUTH/ PEOPLE WITH DISABILITY

I, _____, being a duly authorised representative and acting on my capacity as _____ of _____, hereby confirm that the above mentioned business is 100% owned by women/ youth/ people with disability.

As witnesses: -

1. _____
2. _____

Authorised Signatory
Date _____

D. Certificate for RURAL SETTING

I, _____, being a duly authorised representative and acting on my capacity as _____ of _____, hereby confirm that the above mentioned business has been established and operates from a rural area.

LOCATION OF BUSINESS

WARD	VILLAGE

As witnesses: -

1. _____
2. _____

Authorised Signatory
Date _____

E. Certificate for EMPLOYMENT

I, _____, being a duly authorised representative and acting on my capacity as _____ of _____, hereby confirm that the above mentioned business has employed majority of any of the following categories- women/ youth/ people with disability.

Total no employees _____ No of Women (W) _____ Youth (Y) _____

People with disability (PWD) _____

% ratio of (W+ Y+ PWD) to Total no of employees _____ (Cut-off point will be 60%)

As witnesses: -

1. _____

Authorised Signatory

2. _____

Date

NB: Youth in this regard will people within the age of 18-35 years.

NB: Companies MUST provide evidence for the category ticked so that BEC can make verifications for the preference entitlement.

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CONTRACT

PART 1: AGREEMENTS AND CONTRACT DATA

Form of Offer and Acceptance
Contract Data

PART 2: PRICING DATA

Pricing Instructions

PART 3: SCOPE OF WORK

Scope of work

CONTRACT PART 1 AGREEMENTS & CONTRACT DATA	FORM OF OFFER AND ACCEPTANCE
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OFFER

The Botswana Examinations Council, P/Bag 0070, Gaborone, has solicited offers to enter into a contract for the procurement of:

THE SUPPLY, DELIVERY AND IMPLEMENTATION OF A PRIVATE CLOUD SOLUTION BASED ON HYPER CONVERGED INFRASTRUCTURE

The bidder, identified in the signature block below, has examined the documents listed in the Tender Data and addenda thereto as listed in the Tender Schedules, and by submitting this offer has accepted the conditions of tender.

By attaching the signature of a duly authorized representative to this part of this Form of Offer and Acceptance, the bidder offers to perform all of the obligations and liabilities of the Contractor (or the Consultant or the Supplier as the case may be) under the Contract including compliance with all its terms and conditions according to their true intent and meaning for an amount to be determined in accordance with the Conditions of Contract identified in the Contract Data.

The total of the amount tendered is _____

_____ Pula, (in words); P_____ (in figures). (Not applicable for rate only contracts)

This Offer, of which the bidder has signed one original, may be accepted by the Procuring Organisation by signing the form of Acceptance overleaf and returning one fully executed original of this document including the Schedule of Deviations (if any) to the bidder before the end of the period of validity stated in the Tender Data, whereupon the bidder becomes the party named as the Contractor, (or the Consultant, Professional Service Provider, Service Provider or the Supplier as the case may be) in the Conditions of Contract identified in the Contract Data.

For the tenderer:

Signature(s)

Name(s)

Capacity

(Insert name and address of organisation)

Name &
signature of
witness

Date

ACCEPTANCE

By attaching the signature of a duly authorized representative to this part of this Form of Offer and Acceptance, the Procuring Organization accepts the bidder's Offer. In consideration thereof, the Procuring Organization shall pay the Contractor, (or the Consultant or the Supplier as the case may be) the amount due in accordance with the Conditions of Contract identified in the Contract Data. Acceptance of the bidder's Offer shall form an Agreement between the Procuring Organization and the bidder upon the terms and conditions contained in this Agreement and in the Contract that is the subject of this Agreement.

The terms of the Contract, are contained in:

- Part 1 Agreements and Contract Data, (which includes this Form of Offer and Acceptance)
- Part 2 Pricing Data
- Part 3 Scope of Work

and drawings and documents (or parts thereof), which may be incorporated by reference into the above listed Parts.

Deviations from and amendments to the documents listed in the Tender Data and any addenda thereto listed in the Tender Schedules as well as any changes to the terms of the Offer agreed by the bidder and the Procuring Organization during this process of Offer and Acceptance, are contained in the Schedule of Deviations attached to and forming part of this Form of Offer and Acceptance. No amendments to or deviations from said documents are valid unless contained in this Schedule, which must be signed by the duly authorized representative(s) for both parties.

The bidder shall within one week of receiving a fully executed original of this Agreement, including the Schedule of Deviations (if any), contact the Procuring Organization's agent (whose details are given in the Contract Data) to arrange the delivery of any securities, bonds, guarantees, proof of insurance and any other documentation to be provided in terms of the Conditions of Contract identified in the Contract Data at, or just after, the date this Agreement comes into effect. Failure to fulfill any of these obligations in accordance with those terms shall constitute a repudiation of this Agreement.

Notwithstanding anything contained herein, this Agreement comes into effect on the date when the bidder receives one fully executed original of this document, including the Schedule of Deviations (if any). Unless the bidder (now Contractor, Consultant or Supplier) within five days of the date of such receipt notifies the Procuring Organization in writing of any reason why he cannot accept the contents of this Form of Offer and Acceptance, this Agreement shall constitute a binding contract between the Parties.

For the Botswana Examinations Council

Signature(s)

Name(s)

Capacity

(Insert name and address of organisation)

Name &
signature of
witness

.....

Date

.....

CONTRACT PART 2 PRICING DATA	PRICING INSTRUCTIONS
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TENDER NO. BEC ICT 002/22-23: THE SUPPLY, DELIVERY AND IMPLEMENTATION OF A PRIVATE CLOUD SOLUTION BASED ON HYPER CONVERGED INFRASTRUCTURE

Bidders should provide costing for each item they wish to tender for as specified in the Technical Bid. The phases in the table below are intended as a guideline, and bidders are free to specify phases which are consistent with their Technical Bid.

SUMMARY PRICING SCHEDULE (PS)

The quoted prices should be inclusive of 14% VAT and/or all the Taxes in accordance with the requirements of Botswana Tax Laws.

NB: THE PRICES SHOULD BE INCLUDED IN THE BIDS PROPOSAL

Table K: Sample Pricing Template

ITEM No.	DESCRIPTION	QUANTITY	UNIT PRICE	AMOUNT
1.	Hyper Converged Infrastructure Solution for Primary Site			
2.	Hyper Converged Infrastructure solution for Disaster Recovery Site			
3.	Private Cloud Solution			
4.	Management Servers			
5.	Enterprise Backup and Replication Software			
6.	Dedicated Backup Server			
7.	Local Backup Appliance			
8.	Remote Backup Appliance with Virtual Tape Library			
9.	Installation and Configuration			
10.	Migration of workloads			
11.	Training of 3 administrators			
12.	Post Installation Support and Maintenance for 3 years.			
			Sub-Total	
			VAT (@ 14 %)	
			Grand Total:	

1. All costs must include VAT (for VAT registered companies), Withholding Tax and all other applicable taxes. **The tax laws of Botswana will apply to the ITT and the signed contract.**
2. All prices should be fixed where possible. Where a variable cost is included, it should be estimated as the maximum to be charged.
3. Payments will be made based on actual cost incurred up to the amount stipulated in the pricing schedules.
4. Tenders must be valid for a period of at least 120 days.
5. Payments will be made in accordance with agreed payments schedules. Payment shall be made within 30 days after receipt of goods / services / works. **NB: There shall be no advance payment of goods/services/works.**

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1. Purchaser's objectives

The purpose of this invitation to tender is to solicit companies that meet the compliance criteria outlined in item 1.3 to submit proposals for the Supply, Delivery and Implementation of a Private Cloud Solution based on Hyper Converged Infrastructure to Botswana Examinations Council. After the acceptance of the solution, post implementation support and maintenance shall resume.

The tender shall be awarded as a whole tender to one bidder. BEC will give contracts to a bidder who is prepared to offer services required. Capability as determined by the evaluation criteria in the bid document remains paramount to the final decisions of award/ or rejection.

2. Scope

The following services are in the scope of this project:

- Supply of Hyper Converged Infrastructure hardware for the Primary Site
- Supply of Hyper Converged Infrastructure hardware for the Disaster Recovery Site
- Supply of Hyper Converged Infrastructure hypervisors for Primary and Disaster Recovery Site
- Supply of a Private Cloud Solution for the Primary and Disaster Recovery Sites
- Supply of an enterprise virtual machine Backup, Replication and Recovery software solution
- Supply of enterprise backup hardware
- Supply of a Central management software solution
- Installation and configuration of the supplied hardware and solutions
- Migration of workloads (virtual servers and data) from the current environment to the new environment
- Training of three (3) administrators
- Documentation
- Post Implementation Support and Maintenance

A more detailed and comprehensive description of the required services is outlined in table 1.

3. Project Cost

The bidder shall provide the cost of each item proposed including all applicable taxes in the provision of internet services to the council. In outlining the cost, a sufficient breakdown of each element should be indicated as outlined on tables PS1, PS2, and PS3 under Summary Pricing Schedule.

NB: Payment will be made no later than 30 days after completion of rendering of service and issuance of the invoice.

4. Format and Content of Responses

Bids should be concise, to the point and address all issues raised in this Invitation to Tender document. The strength of the bidder, methodology, cost and personnel proposed will be key factors in the selection process. Bidders should not alter the formats given in this document when submitting the bid. The forms listed under Returnable Documents are to be supplied as they form part of the evaluation.

4.1 Bid

Bids must include the following items preferably in this order:

- Response Form and supporting documents
- Company Profile
- All returnable documents
- Any relevant information

4.1.1 Company Profile

Bidders should highlight the capability of the organisation to undertake this project and list any similar assignments which have been successfully undertaken in the past. Bidders should note that companies that have successfully implemented similar projects in the past will have an added advantage.

4.1.2 Appendices

Documents which cannot be incorporated in the body of the bid should be assembled and indexed and then included in the appendices of the bid. Bidders are free to provide any further information should they wish to do so.

5. Quality plans and control

Bidders are required to outline their Quality Management and Quality Assurance methodologies and how they would be implemented in relation to the project. The following areas should be covered in this section:

- How the work is going to be completed to the required standard, within the project cost and on time.
- How quality management is to be ensured during the project.

NB: The proposal must be made in English.

-----**END OF DOCUMENT**-----