



REQUEST FOR BID RFB-PROFESSIONAL SERVICES

BID NUMBER: RW10392896/21

**SUPPLY, DELIVERY, INSTALLATION, DATA MIGRATION AND DEPLOYMENT OF SERVER
INFRASTRUCTURE BASED ON A HYPER-CONVERGED SOLUTION AND
HARDWARE/SOFTWARE MAINTENANCE AND SUPPORT SERVICES AT RAND WATER
FOR A DURATION OF FIVE (5) YEARS**

C2.2 PRICING SCHEDULE/BILLS OF MATERIAL (BOM)

The Below tables present the Bill of Material (BOM) and the Pricing schedule.

**Table 1.
Rietvlei (Head Office)**

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Rack	No racks required			
Blade Enclosure	12000 Blade enclosure provided with relevant redundant 100GB Interconnect switches Modules providing 100GB uplinks and 50GB downlinks with relevant 32GB FC connectivity and Ethernet Connectivity and all cables and transceivers for connectivity.		1	
Virtualization Blades Servers	Blade servers, each configured with: <ul style="list-style-type: none"> - 2x Processors: Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor. - Memory: 768GB (64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit). - Internal HDD: 2 x 240GB SSDs. - Mezzanine: Converged Network Adapter or equivalent with 25GB Ethernet and 32GB FC). 		7	
Virtualization software	Socket virtualization software licenses		14	
Backup media servers	Backup media blades, each configured with: <ul style="list-style-type: none"> - Processors: Intel Xeon-Silver 4314 2.4GHz 16-core 135W Processor. - Memory: 256GB (64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit). - Internal HDD: 2 x 240GB SSDs. - Mezzanine: Converged Network Adapter or equivalent with 25GB Ethernet and 32GB FC). 		2	

Networking	Ethernet: 48 Port 25G SFP+/28 switch, with: <ul style="list-style-type: none"> - 8 x 100G QSFP+/28 uplink ports. - 4 x 10Gb SFP+ SR Transceivers. - 10 x 1G SFP RJ45 T Transceiver. - 2 x 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable. - Cables and the necessary transceivers for connectivity. 		2	
SAN Switches	<ul style="list-style-type: none"> - SN6700B 64Gb 56/24 24-port 32Gb Short Wave SFP28 Integrated Fibre Channel Switch. - 48 x QK735A, Premier Flex LC/LC Multi-mode OM4 2 Fibre 15m Cable 		2	
Storage Array (Minimum Requirements)	Primera 600 2-way storage Base		1	
	Primera A630 2N controller		1	
	Primera 600 32Gb 4p FC HBA		2	
	Primera 600 7.68TB SFF FE SSD		24	
	Primera 600 Data encryption LTU		1	
Backup				
Backup to Disk	StoreOnce 5260 Base System		1	
	StoreOnce Gen4 32Gb Fibre Channel Network Card LTU		2	
	StoreOnce 5260/5660 192TB Upgrade LTU		2	
	StoreOnce 5260/5660 192TB Upgrade Kit		2	
	StoreOnce Encryption E-LTU		1	
Tape Library	MSL 3040 Scalable Tape Library		1	
	LTO-9 FC tape drives		3	
	LTO9 Ultrium Media with Labels		100	
	LTO Cleaning Cartridges		3	
Backup Software	<ul style="list-style-type: none"> - Backup Software - Enterprise-class backup software providing comprehensive virtual and physical server protection with support and advanced hypervisor integration for Virtual Machines (VMs) and physical servers like SAP HANA appliances, etc. including DR replication. - Backup for 159 Virtual Machines. - Backup for 133TB with projected growth of 10% per year. 			
Consulting and Deployment services	<ul style="list-style-type: none"> - Project Management with complete documentation of the solution (Test, sign-off and handover). - Solution design. 			

	<ul style="list-style-type: none"> - Hardware design (server, network, storage and backup). - Hyper-V design. - Solution installation and configuration. - Onsite installation and startup services for server, network, storage, backup solution as per the design. - Hyper-V installation and configuration as per the design. - Data migration (133TB), from current environment to new infrastructure. - V2V/P2V migrations to new environment (159 guest operating systems). - Private cloud deployment and management capability on the acquired infrastructure. 			
--	--	--	--	--

Table 2.
Bulk Water Distribution

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Rack	42U 600x1200mm Advanced Shock Racks each with 4 x PDUs		2	
Blade Enclosure	12000 Blade enclosure provided with relevant redundant 100GB Interconnect switches Modules providing 100GB uplinks and 50GB downlinks with relevant 32GB FC connectivity and Ethernet Connectivity and all cables and transceivers for connectivity.		1	
Virtualization Blades Servers	Blade servers, each configured with: <ul style="list-style-type: none"> - 2x Processors: Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor. - Memory: 768GB (64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit). - Internal HDD: 2 x 240GB SSDs. - Mezzanine: Converged Network Adapter or equivalent with 25GB Ethernet and 32GB FC). 		5	
Virtualization software	Socket virtualization software licenses		10	
Backup media servers	Backup media blades, each configured with: <ul style="list-style-type: none"> - Processors: Intel Xeon-Silver 4314 2.4GHz 16-core 135W Processor - Memory: 256GB (64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit). - Internal HDD: 2 x 240GB SSDs. 		1	

	<ul style="list-style-type: none"> - Mezzanine: Converged Network Adapter or equivalent with 25GB Ethernet and 32GB FC). 			
Networking	Ethernet: 48 Port 25G SFP+/28 switch, with: <ul style="list-style-type: none"> - 8 x 100G QSFP+/28 uplink ports - 4 x 10Gb SFP+ SR Transceivers - 10 x 1G SFP RJ45 T Transceiver - 2 x 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable - Cables and the necessary transceivers for connectivity 		2	
SAN Switches	<ul style="list-style-type: none"> - SN6700B 64Gb 56/24 24-port 32Gb Short Wave SFP28 Integrated Fibre Channel Switch. - 48 x QK735A, Premier Flex LC/LC Multi-mode OM4 2 Fibre 15m Cable 		2	
Storage Array (Minimum Requirements)	Primera 600 2-way Storage Base		1	
	Primera A650 2N Controller		1	
	Primera 600 32Gb 4p FC HBA		2	
	Primera 600 Series 2U24 SFF Enclosure		1	
	Primera 600 7.68TB SFF FE SSD		48	
	Primera 600 Data Encryption LTU		1	
Backup				
Backup to Disk	StoreOnce 5260 Base System		1	
	StoreOnce Gen4 32Gb Fibre Channel Network Card LTU		2	
	StoreOnce 5260/5660 192TB Upgrade LTU		2	
	StoreOnce 5260/5660 192TB Upgrade Kit		2	
	StoreOnce Encryption E-LTU		1	
Tape Library	MSL 3040 Scalable Tape Library		1	
	LTO-9 FC tape drives		3	
	LTO9 Ultrium Media with Labels		100	
	LTO Cleaning Cartridges		3	
Backup Software	<ul style="list-style-type: none"> - Backup Software - Enterprise-class backup software providing comprehensive virtual server protection with support and advanced hypervisor integration for Virtual Machines (VMs), including replication to HO for Central Depot workloads site. - Backup for 54 Virtual Machines - Backup for 47 TB with projected growth of 10% per year. 			

Consulting and Deployment services	<ul style="list-style-type: none"> - Project Management with complete documentation of the solution (Test, sign-off and handover) - Solution design. - Hardware design (server, network, storage and backup). - Hyper-V design. - Solution installation and configuration - Onsite installation and startup services for server, network, storage, backup solution as per the design. - Hyper-V installation and configuration as per the design. - Data migration (47TB), from current environment to new infrastructure. - V2V/P2V migrations to new environment (54 guest operating systems). - Private cloud deployment and management capability on the acquired infrastructure. 			
------------------------------------	---	--	--	--

Table 3.
Palmiet

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Rack	42U 600x1075mm Advanced Shock Racks each with 2 x PDUs		2	
Management Server	Management each configured with: <ul style="list-style-type: none"> - 2 x Processors: Intel Xeon-Silver 4310 (2.1GHz 12-core 120W) CPUs - Memory:128 x32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Caching Drives: 4 x 960GB SSD (Solid state drives) - NIC: 1 x 25GB 2 port Ethernet Adapters. - NIC: 1 x 1GB Base-T 4-port Ethernet Adapters - Cables and transceivers for connectivity 		1	
Hyper-Converged nodes	<ul style="list-style-type: none"> - Hyper-Converged Nodes, each configured with: - 2 x Processors: Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor. - Memory: 384 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit 		2	

	<ul style="list-style-type: none"> - OS Drives: 2 x 480GB SSDs. - Flash Drives: 4 x 1.92GB Mixed Use SSDs - NIC: 2 x 25GB 2 port Ethernet Adapters. - All cables and transceivers for connectivity. 			
Virtualization and Hyper-Converged software	Socket virtualization software licenses		4	
Networking	Interconnect 16 port 25GbE 24SFP28 4QSFP28 switches with: <ul style="list-style-type: none"> - 4 x 10Gb SFP+ SR Transceivers - 10 x 1G SFP RJ45 T Transceiver - 16 x 25Gb SFP28 to SFP28 3m Direct Attach Copper Cable - 2 x 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable 		2	
Backup				
Backup to Disk	StoreOnce 3660 80TB Base System		1	
	StoreOnce Gen4 Plus 10/25Gb 2-port SFP Adapter		1	
	StoreOnce Gen4 10/25Gb SFP Network Card LTU		1	
	StoreOnce Encryption E-LTU		1	
Backup Software	<ul style="list-style-type: none"> - Backup Software - Enterprise-class backup software providing comprehensive virtual server protection with support and advanced hypervisor integration for Virtual Machines (VMs), including replication to DR site. - Backup for 4 Virtual Machines - Backup for 1.6TB with projected growth of 10% per year. 			
Consulting and Deployment services	<ul style="list-style-type: none"> - Project Management with Complete documentation of the solution (Test, sign-off and handover) - Solution design must include. <ul style="list-style-type: none"> - Hardware design (Hyper-Converged). - Hyper-V Design. - Backup Design - Network Design - Solution Installation and Configuration. - Onsite Installation and start up services for Hyper-Converged, Network, Storage, backup solution as per the design. 			

	<ul style="list-style-type: none"> - Hyper-V installation and configuration as per the design. - Data migration (1,5TB), from current environment to new infrastructure. - V2V/P2V migrations to new environment. (4 Guest Operating System). - Provide a private cloud deployment and management capability on the acquired infrastructure. - 			
--	---	--	--	--

Table 4.
Zuikerbosch

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Rack	42U 600x1075mm Advanced Shock Racks each with 2 x PDU's		2	
Management Server	Management each configured with: <ul style="list-style-type: none"> - 2 x Processors: Intel Xeon-Silver 4310 (2.1GHz 12-core 120W) CPUs - Memory:128 x32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Caching Drives: 4 x 960GB SSD (Solid state drives) - NIC: 1 x 25GB 2 port Ethernet Adapters. - NIC: 1 x 1GB Base-T 4-port Ethernet Adapters - Cables and transceivers for connectivity 		1	
Hyper-Converged nodes	<ul style="list-style-type: none"> - Hyper-Converged Nodes, each configured with: - 2 x Processors: Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor. - Memory: 384 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Flash Drives: 4 x 1.92GB Mixed Use SSDs - NIC: 2 x 25GB 2 port Ethernet Adapters. - All cables and transceivers for connectivity. 		2	
Virtualization and Hyper-Converged software	Socket virtualization software licenses		4	

Networking	Interconnect16 port 25GbE 24SFP28 4QSFP28 switches with: <ul style="list-style-type: none"> - 4 x 10Gb SFP+ SR Transceivers - 10 x 1G SFP RJ45 T Transceiver - 16 x 25Gb SFP28 to SFP28 3m Direct Attach Copper Cable - 2 x 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable 		2	
Backup				
Backup to Disk	StoreOnce 3660 80TB Base System		1	
	StoreOnce Gen4 Plus 10/25Gb 2-port SFP Adapter		1	
	StoreOnce Gen4 10/25Gb SFP Network Card LTU		1	
	StoreOnce Encryption E-LTU		1	
Backup Software				
Backup Software	<ul style="list-style-type: none"> - Backup Software - Enterprise-class backup software providing comprehensive virtual server protection with support and advanced hypervisor integration for Virtual Machines (VMs), including replication to DR site. - Backup for 4 Virtual Machines - Backup for 1.6TB with projected growth of 10% per year. 			
Consulting and Deployment services				
Consulting and Deployment services	<ul style="list-style-type: none"> - Project Management with Complete documentation of the solution (Test, sign-off and handover) - Solution design must include. <ul style="list-style-type: none"> - Hardware design (Hyper-Converged). - Hyper-V Design. - Backup Design - Network Design - Solution Installation and Configuration. - Onsite Installation and start up services for Hyper-Converged, Network, Storage, backup solution as per the design. - Hyper-V installation and configuration as per the design. - Data migration (6TB), from current environment to new infrastructure. - V2V migrations to new environment 18 Virtual Machines. - Provide a private cloud deployment and management capability on the acquired infrastructure. - 			

Table 5.
Analytical Services

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Rack	42U 600x1075mm Advanced Shock Racks each with 2 x PDUs		2	
Management Server	Management each configured with: <ul style="list-style-type: none"> - 2 x Processors: Intel Xeon-Silver 4310 (2.1GHz 12-core 120W) CPUs - Memory:128 x32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Caching Drives: 4 x 960GB SSD (Solid state drives) - NIC: 1 x 25GB 2 port Ethernet Adapters. - NIC: 1 x 1GB Base-T 4-port Ethernet Adapters - Cables and transceivers for connectivity 		1	
Hyper-Converged nodes	<ul style="list-style-type: none"> - Hyper-Converged Nodes, each configured with: - 2 x Processors: Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor. - Memory: 384 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Flash Drives: 4 x 1.92GB Mixed Use SSDs - NIC: 2 x 25GB 2 port Ethernet Adapters. - All cables and transceivers for connectivity. 		4	
Virtualization and Hyper-Converged software	Socket virtualization software licenses		8	
Networking	Interconnect16 port 25GbE 24SFP28 4QSFP28 switches with: <ul style="list-style-type: none"> - 4 x 10Gb SFP+ SR Transceivers - 10 x 1G SFP RJ45 T Transceiver - 16 x 25Gb SFP28 to SFP28 3m Direct Attach Copper Cable - 2 x 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable 		2	
Backup				
Backup to Disk	StoreOnce 3660 80TB Base System		1	

	StoreOnce Gen4 Plus 10/25Gb 2-port SFP Adapter		1	
	StoreOnce Gen4 10/25Gb SFP Network Card LTU		1	
	StoreOnce Encryption E-LTU		1	
Backup Software	<ul style="list-style-type: none"> - Backup Software - Enterprise-class backup software providing comprehensive virtual server protection with support and advanced hypervisor integration for Virtual Machines (VMs), including replication to DR site. - Backup for 32 Virtual Machines - Backup for 25TB with projected growth of 10% per year. 			
Tape Library	MSL 3040 Scalable Tape Library		1	
	LTO-9 FC tape drives		3	
	LTO9 Ultrium Media with Labels		100	
	LTO Cleaning Cartridges		3	
Consulting and Deployment services	<ul style="list-style-type: none"> - Project Management with Complete documentation of the solution (Test, sign-off and handover) - Solution design must include. <ul style="list-style-type: none"> - Hardware design (Hyper-Converged). - Hyper-V Design. - Backup Design - Network Design - Solution Installation and Configuration. - Onsite Installation and start up services for Hyper-Converged, Network, Storage, backup solution as per the design. - Hyper-V installation and configuration as per the design. - Data migration (25TB), from current environment to new infrastructure. - V2V migrations to new environment 32 Virtual Machines. - Provide a private cloud deployment and management capability on the acquired infrastructure. 			

Table 6.
Vereeniging Station

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Rack	42U 600x1075mm Advanced Shock Racks each with 2 x PDUs		2	
Management Server	Management each configured with: <ul style="list-style-type: none"> - 2 x Processors: Intel Xeon-Silver 4310 (2.1GHz 12-core 120W) CPUs - Memory:128 x32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Caching Drives: 4 x 960GB SSD (Solid state drives) - NIC: 1 x 25GB 2 port Ethernet Adapters. - NIC: 1 x 1GB Base-T 4-port Ethernet Adapters - Cables and transceivers for connectivity 		1	
Hyper-Converged nodes	<ul style="list-style-type: none"> - Hyper-Converged Nodes, each configured with: - 2 x Processors: Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor. - Memory: 384 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Flash Drives: 4 x 1.92GB Mixed Use SSDs - NIC: 2 x 25GB 2 port Ethernet Adapters. - All cables and transceivers for connectivity. 		4	
Virtualization and Hyper-Converged software	Socket virtualization software licenses		8	
Networking	Interconnect16 port 25GbE 24SFP28 4QSFP28 switches.with: <ul style="list-style-type: none"> - 4 x 10Gb SFP+ SR Transceivers - 10 x 1G SFP RJ45 T Transceiver - 16 x 25Gb SFP28 to SFP28 3m Direct Attach Copper Cable - 2 x 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable 		2	

Backup				
Backup to Disk	StoreOnce 3660 80TB Base System		1	
	StoreOnce Gen4 Plus 10/25Gb 2-port SFP Adapter		1	
	StoreOnce Gen4 10/25Gb SFP Network Card LTU		1	
	StoreOnce Encryption E-LTU		1	
Backup Software	<ul style="list-style-type: none"> - Backup Software - Enterprise-class backup software providing comprehensive virtual server protection with support and advanced hypervisor integration for Virtual Machines (VMs), including replication to DR site. - Backup for 10 Virtual Machines - Backup for 21TB with projected growth of 10% per year. 			
Consulting and Deployment services	<ul style="list-style-type: none"> - Project Management with Complete documentation of the solution (Test, sign-off and handover) - Solution design must include. <ul style="list-style-type: none"> - Hardware design (Hyper-Converged). - Hyper-V Design. - Backup Design - Network Design - Solution Installation and Configuration. - Onsite Installation and start up services for Hyper-Converged, Network, Storage, backup solution as per the design. - Hyper-V installation and configuration as per the design. - Data migration (21TB), from current environment to new infrastructure. - V2V migrations to new environment 10 Virtual Machines. 			

Table 7.
OT Production and Failover/High Availability

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Rack	42U 600x1075mm Advanced Shock Racks each with 2 x PDUs		2	
Management Server	Management each configured with: <ul style="list-style-type: none"> - 2 x Processors: Intel Xeon-Silver 4310 (2.1GHz 12-core 120W) CPUs - Memory:128 x32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Caching Drives: 4 x 960GB SSD (Solid state drives) - NIC: 1 x 25GB 2 port Ethernet Adapters. - NIC: 1 x 1GB Base-T 4-port Ethernet Adapters - Cables and transceivers for connectivity 		2	
Hyper-Converged nodes	<ul style="list-style-type: none"> - Hyper-Converged Nodes, each configured with: - 2 x Processors: Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor. - Memory: 384 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Flash Drives: 4 x 1.92GB Mixed Use SSDs - NIC: 2 x 25GB 2 port Ethernet Adapters. - All cables and transceivers for connectivity. 		8	
Virtualization and Hyper-Converged software	Socket virtualization software licenses		16	
Networking	Interconnect16 port 25GbE 24SFP28 4QSFP28 switches. <ul style="list-style-type: none"> - 4 x 10Gb SFP+ SR Transceivers - 10 x 1G SFP RJ45 T Transceiver - 16 x 25Gb SFP28 to SFP28 3m Direct Attach Copper Cable - 2 x 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable 		4	
Backup				
Backup to Disk	StoreOnce 3660 80TB Base System		1	
	StoreOnce Gen4 Plus 10/25Gb 2-port SFP Adapter		1	

	StoreOnce Gen4 10/25Gb SFP Network Card LTU		1	
	StoreOnce Encryption E-LTU		1	
Backup Software	<ul style="list-style-type: none"> - Backup Software - Enterprise-class backup software providing comprehensive virtual server protection with support and advanced hypervisor integration for Virtual Machines (VMs), including replication to DR site. - Backup for 10 Virtual Machines - Backup for 15TB with projected growth of 10% per year. 			
Consulting and Deployment services	<ul style="list-style-type: none"> - Project Management with Complete documentation of the solution (Test, sign-off and handover) - Solution design must include. <ul style="list-style-type: none"> - Hardware design (Hyper-Converged). - Hyper-V Design. - Backup Design - Network Design - Solution Installation and Configuration. - Onsite Installation and start up services for Hyper-Converged, Network, Storage, backup solution as per the design. - Hyper-V installation and configuration as per the design. - Data migration (15TB), from current environment to new infrastructure. - V2V migrations to new environment 10 Virtual Machines. 			

Table 8.
Technical Support

Category	Description	Hours	Price
Professional Technical support	Adhoc support services for the Platform, Application and Software installation and configuration and troubleshooting (e.g. MS OS, Linux, VMWare, Hyper-V, etc.)	480	

Table 9.
Maintenance and Support

Category	Description	Duration	Price
Hardware and Firmware maintenance and support	Hardware: 5-year Complete Care Support (Semi-annual operating-system environment patch analysis, Annual Patching, firmware analysis, Annual System Health Check) Software: 5-year telephonic support standard. - Complete Care support package should be inclusive of a reactive response service level agreement (SLA) and proactive deliverables overseen by an account support manager. - The service provider should have Back to Back agreement with the OEM for the support pack quoted.	Year 1	
		Year 2	
		Year 3	
		Year 4	
		Year 5	

Table 10.
Service Credits

Category	Description	Hours	Price
Service Credits	Credits from the OEM that can be redeemed over a 5-year period.	320	

Table 11.
Project Implementation

Category	Description	Duration	Total Price
Project Implementation	Supply, Installation, configuration and Data Migration.	3 Months	

Table 11.
Adhoc Server and Storage Infrastructure

Note: This Infrastructure will be required on an Adhoc basis and it should be the latest technology available at that time.

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Rack	42U 600x1075mm Advanced Shock Racks each with 2 x PDUs		2	
Management Server	Management each configured with: <ul style="list-style-type: none"> - 2 x Processors: Intel Xeon-Silver 4310 (2.1GHz 12-core 120W) CPUs - Memory:128 x32GB (1x32GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Caching Drives: 4 x 960GB SSD (Solid state drives) - NIC: 1 x 25GB 2 port Ethernet Adapters. - NIC: 1 x 1GB Base-T 4-port Ethernet Adapters - Cables and transceivers for connectivity 		2	
Hyper-Converged nodes	<ul style="list-style-type: none"> - Hyper-Converged Nodes, each configured with: - 2 x Processors: Intel Xeon-Gold 6326 2.9GHz 16-core 185W Processor. - Memory: 384 64GB (1x64GB) Dual Rank x4 DDR4-3200 CAS-22-22-22 Registered Smart Memory Kit - OS Drives: 2 x 480GB SSDs. - Flash Drives: 4 x 1.92GB Mixed Use SSDs - NIC: 2 x 25GB 2 port Ethernet Adapters. - All cables and transceivers for connectivity. 		8	
Virtualization and Hyper-Converged software	Socket virtualization software licenses		16	
Networking	Interconnect16 port 25GbE 24SFP28 4QSFP28 switches. <ul style="list-style-type: none"> - 4 x 10Gb SFP+ SR Transceivers - 10 x 1G SFP RJ45 T Transceiver - 16 x 25Gb SFP28 to SFP28 3m Direct Attach Copper Cable - 2 x 100G QSFP28 to QSFP28 1m Direct Attach Copper Cable 		4	

Backup				
Backup to Disk	StoreOnce 3660 80TB Base System		1	
	StoreOnce Gen4 Plus 10/25Gb 2-port SFP Adapter		1	
	StoreOnce Gen4 10/25Gb SFP Network Card LTU		1	
	StoreOnce Encryption E-LTU		1	
Backup Software	<ul style="list-style-type: none"> - Backup Software - Enterprise-class backup software providing comprehensive virtual server protection with support and advanced hypervisor integration for Virtual Machines (VMs), including replication to DR site. - Backup for 10 Virtual Machines - Backup for 15TB with projected growth of 10% per year. 			
Storage	Additional Storage capacity (Storage upgrade) 84TB RAW, 67TB Useable and 23TB Flash.		2	
Consulting and Deployment services	<ul style="list-style-type: none"> - Project Management with Complete documentation of the solution (Test, sign-off and handover) - Solution design must include. <ul style="list-style-type: none"> - Hardware design (Hyper-Converged). - Hyper-V Design. - Backup Design - Network Design - Solution Installation and Configuration. - Onsite Installation and start up services for Hyper-Converged, Network, Storage, backup solution as per the design. - Hyper-V installation and configuration as per the design. - Data migration (15TB), from current environment to new infrastructure. - V2V migrations to new environment 10 Virtual Machines. 			

Table 11.

Adhoc 2 X Converged System 500 for SAP HANA BPC – PRIMARY & SECONDARY SITES

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Hardware	42UC7:C37		1	
	Superdome Flex for SAP HANA TDI/Base Configuration 4-socket Base Chassis		1	
	Factory Integrated		1	
	Superdome Flex Intel Xeon-Platinum 8176 (2.1GHz/28-core/165W) Processor Kit		4	
	Factory Integrated		4	
	Superdome Flex 256GB (4x64GB) Quad Rank x4 DDR4-2666 CAS-19-19-19 Load Reduced Memory Kit		12	
	Factory Integrated		12	
	1.2TB SAS 12G Enterprise 10K SFF (2.5in) RW 3Year Warranty Digitally Signed Firmware HDD		2	
	Factory Integrated		2	
	Superdome Flex PCIe Low Profile 16-slot 4 Riser Configuration Kit		1	
	Factory Integrated		1	
	Superdome Flex DVD-RW Drive		1	
	Factory Integrated		1	
	Superdome Flex 9361-4i Internal RAID Controller		1	
	Factory Integrated		1	
	3154-8e 8-port External RAID Controller		2	
	Factory Integrated		2	
	Ethernet 1Gb 4-port 331T Adapter		1	
	Factory Integrated		1	
	Ethernet 10Gb 2-port 562T Adapter		4	
	Factory Integrated		4	
	Superdome Flex for SAP HANA 4-8 Sockets Scale-up Base Configuration with D3710 Storage Tracking		1	
	Factory Integrated		1	
	SAP HANA BC/TDI D3710 Storage		1	
	Factory Integrated		1	

	1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3Year Warranty 512e Digitally Signed Firmware HDD		12	
	Factory Integrated		12	
	800GB SAS 12G Mixed Use SFF (2.5in) SC 3Year Warranty Digitally Signed Firmware SSD		3	
	Factory Integrated		3	
	External 2.0m (6ft) Mini-SAS HD 4x to Mini-SAS HD 4x Cable		2	
	Factory Integrated		2	
	SAP HANA BC/TDI D3710 Storage		1	
	Factory Integrated		1	
	1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3Year Warranty 512e Digitally Signed Firmware HDD		12	
	Factory Integrated		12	
	External 2.0m (6ft) Mini-SAS HD 4x to Mini-SAS HD 4x Cable		2	
	Factory Integrated		2	
	Superdome Flex SAP HANA 4-8 Sockets Scale-up Base Configuration Dual Purpose Storage Tracking		1	
	Factory Integrated		1	
	42U 610mm x 1156mm D Rack		1	
	Superdome Flex for SAP HANA TDI/Base Configuration 4-socket Base Chassis		1	
	Factory Integrated		1	
	Superdome Flex Intel Xeon-Platinum 8176 (2.1GHz/28-core/165W) Processor Kit		4	
	Factory Integrated		4	
	Superdome Flex 256GB (4x64GB) Quad Rank x4 DDR4-2666 CAS-19-19-19 Load Reduced Memory Kit		12	
	Factory Integrated		12	
	1.2TB SAS 12G Enterprise 10K SFF (2.5in) RW 3Year Warranty Digitally Signed Firmware HDD		2	
	Factory Integrated		2	
	Superdome Flex PCIe Low Profile 16-slot 4 Riser Configuration Kit		1	
	Factory Integrated		1	

	Superdome Flex DVD-RW Drive		1	
	Factory Integrated		1	
	Superdome Flex 9361-4i Internal RAID Controller		1	
	Factory Integrated		1	
	3154-8e 8-port External RAID Controller		1	
	Factory Integrated		1	
	Ethernet 1Gb 4-port 331T Adapter		1	
	Factory Integrated		1	
	Ethernet 10Gb 2-port 562T Adapter		4	
	Factory Integrated		4	
	Superdome Flex for SAP HANA 4-8 Sockets Scale-up Base Configuration with D3710 Storage Tracking		1	
	Factory Integrated		1	
	SAP HANA BC/TDI D3710 Storage		1	
	Factory Integrated		1	
	1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3Year Warranty 512e Digitally Signed Firmware HDD		12	
	Factory Integrated		12	
	800GB SAS 12G Mixed Use SFF (2.5in) SC 3Year Warranty Digitally Signed Firmware SSD		3	
	Factory Integrated		3	
	External 2.0m (6ft) Mini-SAS HD 4x to Mini-SAS HD 4x Cable		2	
	Factory Integrated		2	
	Destination Rack 8 x Outlets Single-phase 240V INTL PDU		2	
	Factory Integrated		2	
	Destination Rack 8 x Outlets Single-phase 240V INTL PDU		2	
	Factory Integrated		2	
	Blade System c-Class 10Gb SFP+ SR Transceiver		16	
	Superdome Flex for SAP HANA Special Edition Appliance with D3710 Storage Tracking		1	

Category	Description	Unit Price	Quantity	Total Price
Software	Service guard for Linux x86 Enterprise DVD Media		1	
	Service guard for Linux x86 1Year 24x7 Enterprise PSL Flexible LTU		4	
	Service guard for Linux x86 1Year 24x7 Enterprise PSL Flexible LTU		4	
	Service guard for Linux x86 Enterprise DVD Media		1	
	SUSE Linux Enterprise Server SAP 2 Sockets or 1-2 VM 3Year Subscription 24x7 Support Flexible LTU		4	
	Foundation Software 2 for SUSE Linux Enterprise Server Media License RTU		4	
	Foundation Software 2 for SUSE Linux Enterprise Server Media		2	
Category	Description	Unit Price	Quantity	Total Price
Installation Services	Inside Unpack/Clean Up XL SVC		1	
	Two People at Delivery SVC		1	
	Pre-Delivery Site Survey SVC		1	
	Inside Unpack/Clean Up XL SVC		1	
	Two People at Delivery SVC		1	
	Pre-Delivery Site Survey SVC		1	
	Factory Express Complex Custom SVC		5	
	Bus Crit Server Implem Assist SVC		1	
Category	Description	Total Price		
Support and Maintenance	3Y Proactive Care 24x7 SVC			
	SLES SAP 1-2 VM 3Year Flx LTU Support			
	SAP HANA BC/TDI D3710 Strg Support			
	Package 2 for Quoting Support			
	SD SAP HANA 4s Base Chas Support			
	Service Credit			
	1Y Service Credits 30 Per Year SVC			
	1Y Service Credits Qty 30 SVC			
	Depl Accelerator for SAP HANA SVC			
	3Y Service Credits 30 Per Year SVC			
	3Y Service Credits Qty 90 SVC			
	SAP HANA High Availability SVC			
	SAP HANA Disaster Tolerance SVC			

Table 12.**Adhoc 2 X Converged System 500 for CRM, PO & DMS**

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Hardware	Virtual Rack		2	
	Superdome Flex 4-socket Base Chassis		2	
	Factory Integrated		2	
	Superdome Flex Intel Xeon-Platinum 8176 (2.1GHz/28-core/165W) Processor Kit		8	
	Factory Integrated		8	
	Superdome Flex 128GB (4x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Memory Kit		12	
	Factory Integrated		12	
	1.2TB SAS 12G Enterprise 10K SFF (2.5in) RW 3Year Warranty Digitally Signed Firmware HDD		4	
	Factory Integrated		4	
	Superdome Flex PCIe Full Height 12-slot 3 Riser Configuration Kit		2	
	Factory Integrated		2	
	Superdome Flex DVD-R Drive		2	
	Factory Integrated		2	
	Superdome Flex 9361-4i Internal RAID Controller		2	
	Factory Integrated		2	
	Ethernet 10Gb 2-port 562T Adapter		4	
	Factory Integrated		4	
	D3710 Enclosure		2	
	1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3Year Warranty 512e Digitally Signed Firmware HDD		24	
	Factory Integrated		24	
	800GB SAS 12G Mixed Use SFF (2.5in) SC 3Year Warranty Digitally Signed Firmware SSD		6	
	Medium Standard Delivery-Door/Dock Service		2	
	Blade System c-Class 10Gb SFP+ SR Transceiver		8	

	External 2.0m (6ft) Mini-SAS HD 4x to Mini-SAS HD 4x Cable		4	
Category	Description	Unit Price	Quantity	Total Price
Software	Microsoft Windows Server 2016 (16-core) Standard FIO Not Pre-installed English SW		14	
Category	Description	Unit Price	Quantity	Total Price
Installation services	Inside Unpack/Clean Up XL SVC		2	
	Two People at Delivery SVC		2	
	Pre-Delivery Site Survey SVC		2	
	Installation and Startup Service		1	
	SD Flex Base Chassis Startup SVC		2	
	Installation SVC		1	
	Install MSA D3000 Drive Enclosure Service		2	
	ProLiant Add On Options Install SVC		6	
Category	Description			Total Price
Support & maintenance	3Y Proactive Care 24x7 SVC			
	MS WS2016 16-Core Standard Support			
	D2000 Disk Enclosure Support			
	SD Flex 4s Base Chassis Support			
	Training Credits Servers/Hybrid-IT SVC			

Table 13.**Adhoc 2x Converged System 500 for SAP ERP**

IT Infrastructure solution with software, services and support with the following specifications:				
Category	Description	Unit Price	Quantity	Total Price
Hardware	Virtual Rack		2	
	Superdome Flex 4-socket Base Chassis		2	
	Factory Integrated		2	
	Superdome Flex Intel Xeon-Platinum 8176 (2.1GHz/28-core/165W) Processor Kit		8	
	Factory Integrated		8	
	Superdome Flex 128GB (4x32GB) Dual Rank x4 DDR4-2666 CAS-19-19-19 Registered Memory Kit		12	
	Factory Integrated		12	
	1.2TB SAS 12G Enterprise 10K SFF (2.5in) RW 3Year Warranty Digitally Signed Firmware HDD		4	
	Factory Integrated		4	
	Superdome Flex PCIe Full Height 12-slot 3 Riser Configuration Kit		2	
	Factory Integrated		2	
	Superdome Flex DVD-R Drive		2	
	Factory Integrated		2	
	Superdome Flex 9361-4i Internal RAID Controller		2	
	Factory Integrated		2	
	Ethernet 10Gb 2-port 562T Adapter		4	
	Factory Integrated		4	
	D3710 Enclosure		2	
	1.8TB SAS 12G Enterprise 10K SFF (2.5in) SC 3Year Warranty 512e Digitally Signed Firmware HDD		24	
	Factory Integrated		24	
	800GB SAS 12G Mixed Use SFF (2.5in) SC 3Year Warranty Digitally Signed Firmware SSD		6	
	Medium Standard Delivery-Door/Dock Service		2	
	Blade System c-Class 10Gb SFP+ SR Transceiver		8	

	External 2.0m (6ft) Mini-SAS HD 4x to Mini-SAS HD 4x Cable		4	
Category	Description	Unit Price	Quantity	Total Price
Software	Microsoft Windows Server 2016 (16-core) Standard FIO Not Pre-installed English SW		14	
Category	Description	Unit Price	Quantity	Total Price
Installation services	Inside Unpack/Clean Up XL SVC		2	
	Two People at Delivery SVC		2	
	Pre-Delivery Site Survey SVC		2	
	Installation and Startup Service		1	
	SD Flex Base Chassis Startup SVC		2	
	Installation SVC		1	
	Install MSA D3000 Drive Enclosure Service		2	
	ProLiant Add On Options Install SVC		6	
Category	Description			Total Price
Support & maintenance	3Y Proactive Care 24x7 SVC			
	MS WS2016 16-Core Standard Support			
	D2000 Disk Enclosure Support			
	SD Flex 4s Base Chassis Support			
	Training Credits Servers/Hybrid-IT SVC			
Total excl. vat				

Description	Amount
Hardware Equipment (Including Adhoc)	
Project Implementation	
Maintenance and Support	
Technical Support	
Service Credits	
Total estimated amount excluding VAT	
Total estimated amount including VAT carried to form of offer	

NB: Total Estimated Amount Including VAT, this amount must be carried to form of offer

