



**CORRIGENDUM- 2  
TO  
REQUEST FOR PROPOSAL**

**RFP Reference - NTB/IT/INFRA/2018/12/002**

**SUPPLY, INSTALLATION, TESTING AND  
COMMISSIONING (SITC) OF ICT  
INFRASTRUCTURE AT DC, NEAR DR AND  
FAR DR HOSTED AT SERVICE PROVIDER  
DATA CENTER  
AND MANAGED TELECOM  
AT ALL THE NAINITAL BANK LIMITED  
BRANCHES/OFFICES WITH OPERATION &  
MAINTENANCE**

The Nainital Bank Limited  
17<sup>th</sup>Jan 2019

RFP Reference - NTB/IT/INFRA/2018/12/002

Reference to RFP No: - NTB/IT/INFRA/2018/12/002 dated 26/12/2018 and subsequent Corrigendum dated 11/01/2019(henceforth referred as Corrigendum-1). Amendments to RFP and Corrigendum are mentioned hereunder as Corrigendum 2-

Document /Page	RFP Clause	Clause Description	Bank Response /Amendment
<b>RFP</b> 48	5.4. Detailed Scope of Work:	f) Designing, implementation and Configuration of Windows Active Directory Environment up to branch level (End user).	Amendment :f) Designing, implementation and Configuration of Windows Active Directory Environment up to branch level (End user).Bidder need to Consider 1000 CAL for Active Directory. Refer change in BOQ and Commercial Format
<b>RFP</b> 49	5.4. Detailed Scope of Work:	j) The bidder should ensure that all the supplied hardware and software for the solution must not be End of Support / End of service and spares/upgrades should be available. In case of any equipment goes End of life from OEM, the service provider has to replace it without any extra cost to the Bank to keep the solution working.	Amendment: The bidder should ensure that all the supplied hardware and software for the solution must not be End of Support / End of service and spares/updates/ upgrades(Excluding OS Upgrade) should be available. In case of any equipment goes End of life from OEM, the service provider has to replace it without any extra cost to the Bank to keep the solution working.
<b>RFP</b> 49	5.4. Detailed Scope of Work:	m) Bidder has to provide tools to manage and monitor the infra end to end with application level visibility, excluding end user support	Amendment: m) Bidder has to provide tools to manage and monitor the infra end to end with, excluding end user support.
<b>RFP</b> 50	5.4. Detailed Scope of Work:	v)Ship one copy of monthly data out to Banks' HO, Nainital/RDC Haldwani on an encrypted portable media.	Amendment: v)Ship one copy of monthly data out to Banks' HO, Nainital/RDC Haldwani on an portable media.
<b>RFP</b> 53	5.5. Schedule- I SICT of the ICT Infrastructure for DC and DR	DC design Architecture is expected to deliver the following: a) DC to deliver IT as a service starting with IaaS, PaaS and SaaS in future.	Consider this Clause as deleted
<b>RFP</b> 55	5.7. Scalability	a) All components of the data centre must support scalability to provide continuous growth to meet the requirements and demand coming in from various user departments.	Amendment: a) All components of the data centre must support scalability (For all CAPEX Components Limiting to Specs asked in RFP, for AS A Service Components Limiting factor does not apply) to provide continuous growth to meet the requirements and demand coming in from various user departments.
<b>RFP</b> 55	5.7. Scalability	c) A scalable Data Centre shall easily be expanded or upgraded on demand. Scalability is important because new computing component is constantly being deployed, either to replace legacy component or to support new missions.	Amendment: c) A scalable Data Centre shall easily be expanded or upgraded. Scalability is important because new computing component is constantly being deployed, either to replace legacy component or to support new missions.
<b>RFP</b> 49	Clarification	Clause 5.4 Point (J)	This Clause of RFP Supersede all the warranty clause mentioned in hardware's specs/compliances
<b>Corrigendum 1</b> DC BOQ Clause 6.9.1, Page 4	Line Item 11	Vmware , Vsphere per socket	Amendment : Vmware Vsphere-Standard Edition
<b>Corrigendum 1</b> DC BOQ Clause 6.9.1, Page 4	Line Item 9	MS Windows Std per 2 core Qty :105	Amendment : MS Windows Std per 2 core Qty :160

<b>Corrigendum 1</b> DC BOQ Clause 6.9.1, Page 4	Additional Line Item		New Point : 32. Active directory : Qty - 1000 CAL
<b>Corrigendum 1</b> DR BOQ in Clause 6.9.2, Page 5	Line Item 27 and 28	27 . MS SQL std per 2 core * 28. MS SQL ent per 2 core *	Both Point to be considered removed
<b>Corrigendum 1</b> DR BOQ in Clause 6.9.2, Page 5	Line 9	MS Windows STD per 2 core : Qty : 87	Amendment : MS Windows STD per 2 core : Qty : 136
<b>Corrigendum 1</b> DR BOQ in Clause 6.9.2, Page 5	Line item 10	Vmware , Vsphere per socket	Amendment : Vmware Vsphere- Standard Edition
<b>Corrigendum 1</b> Clause: 7.5 Storage, Page 8	Storage Specification Point 2	The proposed storage system should be of Enterprise class All SSD/ Flash /FMD storage	Amendment : The proposed storage system should be of Enterprise class All SSD/ Flash /FMD storage supporting both Scale-up and Scale-out technology
<b>Corrigendum 1</b> Clause: 7.5 Storage, Page 8	Storage Specification Point 11	The storage array must have complete cache protection using mechanism like mirroring/ de-staging/coherency. Also provide complete cache data protection with battery backup for up to minimum 48 hours .The data shall not be lost in the case of power failure.	Amendment : The storage array must have complete cache protection using mechanism like mirroring/ de- staging/coherency. Also provide complete cache data protection with battery backup for up to minimum 48 hours before restart/shutdown/content refresh. Hence, The data shall not be lost in the case of power failure.
<b>Corrigendum 1</b> Clause: 7.5 Storage, Page 9	Storage Specification Point 24	The storage system should support remote replication for both file and block. After data is replicated at remote storage, data should be stored with “Data De-duplication and Compression”. Any additional hardware or software required to achieve the same should be provided along with replication solution. For OEMs not supporting data deduplication, double capacity should be provided .	Amendment : The storage system should support remote replication for both file and block. Only the de-duplicated data should flow over the network for DR. After data is replicated at remote storage, data should be stored with “Data De- duplication and Compression”. Any additional hardware or software required to achieve the same should be provided along with replication solution. For OEMs not supporting data deduplication, double capacity should be provided .
<b>Corrigendum 1</b> Clause: 7.5 Storage, Page 9	Storage Specification Point 31	Easy to use Single GUI based and web enabled administration interface for configuration ( Create, delete, configure LUN, Tiering Alerts , Cloud configuration and DR Replication). a Friendly GUI Based Storage Administration tools for role based access control ,monitoring , even management and closure, threshold setting, LUN mapping , deallocation ,space reclaim etc. including management of DR and Near DR replication.	Amendment : Easy to use Single GUI based and web enabled administration interface for configuration ( Create, delete, and DR Replication). There Should be a Friendly GUI Based Storage Administration tools for role based access control ,monitoring , threshold setting, LUN mapping , deallocation ,space reclaim etc. including management of DR and Near DR replication.
<b>Corrigendum 1</b> Clause: 7.5 Storage, Page 10	Storage Specification Point 40	The storage system should configured with 8 * 16 Gbps FCand 10Gbe ports across dual controllers for iSCSI/NFS/CIFS. The system should have minimum 4x 12Gbps SAS backend ports.	Amendment : The storage system should configured with 8 * 16 Gbps FC or 4* 16 Gbps FC, and 4 x10Gbe ports across dual controllers for iSCSI/NFS/CIFS. The system should have minimum 4x 12Gbps SAS backend ports.

<p><b>Corrigendum 1</b> Clause: 7.5 Storage, Page 10</p>	<p>Storage Specification Point 41</p>	<p>The Hardware and software quoted should have 5 years warranty and should have OEM support for 6 years from date of commissioning and acceptance, however it should not later than 2 weeks from delivery. 24X7 Support with 2 hrs response time for faults not requiring any spares, 4 hours' response for faults requiring spares. All Licensing including 3 way Replication, Dedupe, compression, encryption etc. to be included</p>	<p>Amendment : The Hardware and software quoted should have 5 years warranty and should have OEM support for 6 years from date of Purchase order, All Licensing including 3 way Replication, Dedupe, compression, encryption etc. to be included.</p>
<p><b>Corrigendum 1</b> Clause: 7.1 Server Sizing: Page 7/8</p>	<p>Server Sizing: server 1</p>	<p>2x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 64 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, 2 Port SFP+ with multimode trans receivers and cables, Separate Management port,Dual Port 16Gb Fibre Channel HBA, RPS</p>	<p>Amendment : 2x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 64 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, Dual Port 10G Base-T Network Interfaces, rNDC, Cables for all 10G ports, Dual Port 16Gb Fibre Channel HBA, RPS</p>
<p><b>Corrigendum 1</b> Clause: 7.1 Server Sizing: Page 7/8</p>	<p>Server Sizing: server 2</p>	<p>2x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 128 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, 900GB 15K RPM SAS Disk x 4, , 2 Port SFP+ with multimode trans receivers and cables, Separate Management port,Dual Port 16Gb Fibre Channel HBA, RPS</p>	<p>Amendment : 2x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 128 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, 900GB 15K RPM SAS Disk x 4, Dual Port 10G Base-T Network Interfaces, rNDC, Cables for all 10G ports, Dual Port 16Gb Fibre Channel HBA, RPS</p>
<p><b>Corrigendum 1</b> Clause: 7.1 Server Sizing: Page 7/8</p>	<p>Server Sizing: server 3</p>	<p>2x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 64 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, 2x 900 GB SAS 15K RPM disk, , 2 Port SFP+ with multimode trans receivers and cables, Separate Management port,Dual Port 16Gb Fibre Channel HBA, RPS</p>	<p>Amendment : 2x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 64 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, 2x 900 GB SAS 15K RPM disk, Dual Port 10G Base-T Network Interfaces, rNDC, Cables for all 10G ports, Dual Port 16Gb Fibre Channel HBA, RPS</p>
<p><b>Corrigendum 1</b> Clause: 7.1 Server Sizing: Page 7/8</p>	<p>Server Sizing: server 4</p>	<p>1x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 64 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, , 2 Port SFP+ with multimode trans receivers and cables, Separate Management port,Dual Port 16Gb Fibre Channel HBA, RPS</p>	<p>Amendment : 1x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 64 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, Dual Port 10G Base-T Network Interfaces, rNDC, Cables for all 10G ports, Dual Port 16Gb Fibre Channel HBA, RPS</p>
<p><b>Corrigendum 1</b> Clause: 7.1 Server Sizing: Page 7/8</p>	<p>Server Sizing: server 5</p>	<p>1x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 128 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, 4x 1.2TB SAS 15K RPM disk, , 2 Port SFP+ with multimode trans receivers and cables, Separate Management port,Dual Port 16Gb Fibre Channel HBA, RPS</p>	<p>Amendment : 1x Intel® Xeon® Gold 6128 3.4G,6C/12T,10.4GT/s 2UPI,19.25M Cache,Turbo,HT (115W) DDR4-2666, 128 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, 4x 1.2TB SAS 15K RPM disk, Dual Port 10G Base-T Network Interfaces, rNDC, Cables for all 10G ports, Dual Port 16Gb Fibre Channel HBA, RPS</p>

<b>Corrigendum 1</b> Clause: 7.1 Server Sizing: Page 7/8	Server Sizing: server 6 (Log Server)	2x 3.0 GHz 6136/150W 12C/24.75MB Cache/DDR4 2666MHz, DDR4 128 Gb RAM, 4x 900GB 12G SAS 15K RPM SFF HDD, , 2 Port SFP+ with multimode trans receivers and cables, Separate Management port,Dual Port 16Gb Fibre Channel HBA, RPS	Amendment : 2x 3.0 GHz 6136/150W 12C/24.75MB Cache/DDR4 2666MHz, DDR4 128 Gb RAM, 4x 900GB 12G SAS 15K RPM SFF HDD, Dual Port 10G Base-T Network Interfaces, rNDC, Cables for all 10G ports, Dual Port 16Gb Fibre Channel HBA, RPS
<b>Corrigendum 1</b> Clause: 7.1 Server Sizing: Page 7/8	Server Sizing: server 7(Other Server for Management)	2x2.4 GHz 6148/150W 20C/27.50MB Cache/DDR4 2666MHz, DDR4 256 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, 2 Port SFP+ with multimode trans receivers and cables, Separate Management port,Dual Port 16Gb Fibre Channel HBA, RPS, Vmware License	Amendment : 2x2.4 GHz 6148/150W 20C/27.50MB Cache/DDR4 2666MHz, DDR4 256 Gb RAM, 300GB 15K RPM SAS 12Gbps 512n 2.5in Hot-plug Hard Drive x 4, Dual Port 10G Base-T Network Interfaces, rNDC, Cables for all 10G ports, Dual Port 16Gb Fibre Channel HBA, RPS, Vmware License
<b>RFP Clause 7.4,</b> Page 78	Access Switches Specification, Point 1	Rack Mountable: Mountable in standard 19 inch rack, minimum 24 port SFP+ , 2x10G Fiber Ports, all 10Gig ports should be populated will necessary transceivers (multimode)	Amendment : Rack Mountable: Mountable in standard 19 inch rack, minimum 24 port copper 10G. The switch should be scalable to support additional 10G/25G connections without changing the base hardware.
<b>RFP Clause 7.4,</b> Page 79	Access Switches Specification, Point 3	Min 300 Gbps switching fabric	Amendment :The switch should support minimum 1Tbps bandwidth
<b>RFP Clause 7.4,</b> Page 79	Access Switches Specification, Point 5	Should support Layer3 protocols	Amendment :Should support Layer3 protocols: BGP, VXLAN, OSPF, RIP, Static routes, VRFs muticast protocols PIM-SM, SSM, MSDP
<b>RFP Clause 7.3,</b> Page 76	Core Switch Point 1	The switch should have 48x10Gig ports/slots, populated with 4 nos. of 10 Gig Single Mode transceiver & 12 nos. of 10 Gig multimode transceivers. Should have minimum 2GB DRAM.	Amendment :The switch should have 48x10Gig ports/slots, populated with 4 nos. of 10 Gig Single Mode transceiver & 12 nos. of 10 Gig multimode transceivers. Should have minimum 20GB DRAM and 40GB Flash.
<b>RFP Clause 7.3,</b> Page 76	Core Switch Point 2	The switch should support line rate throughput.	Amendment :The switch should support minimum 2Tbps bandwidth
<b>RFP Clause 7.3,</b> Page 77	Core Switch Point 14	Dynamic Routing protocol support like OSPF, BGP, ISIS and MPLS etc. from day 1.	Amendment :Dynamic Routing protocol support like OSPF, VXLAN, BGP, EVPN, ISIS or MPLS, VRFs, multicast protocols - PIM-SM, SSM, MSDP
<b>RFP Clause 8,</b> Page 98	Internal Firewall Point 4	2 x 10Gig populated with 2 x10G SFP+ multimode transceivers 8X1 Gig copper ports	Amendment : Minimum 2 x 10G SFP+ Interfaces, and scalable to 4 X 10G SFP+ interface.. All ports should be populated with 10G multimode transceivers. Minimum 4 10/100/1000 copper Interfaces
<b>RFP Clause 8,</b> Page 98	Internal Firewall Point 6	Minimum NGFW throughput 5 Gbps	Amendment :Minimum NGFW throughput 4 Gbps
<b>RFP Clause 12,</b> Page 110	AAA, Point 14	The AAA server should support Account lockout and account blacklisting	Point to be considered as removed
<b>Corrigendum 1</b> Clause 20 Section IV: Financial Bid Format(Revised) Page 22	Table A -BOQ-DC- DR (Capex) Point 5	MS Windows Std per 2 core	Amendment : DC count 160, DR Count 136

<b>Corrigendum 1</b> Clause 20 Section IV: Financial Bid Format Page 22	Table A -BOQ-DC- DR (Capex) Point 12		New Line Item: Active Directory 1000 CAL at DC
<b>Corrigendum 1</b> Clause 20 Section IV: Financial Bid Format Page 22	Table A -BOQ-DC- DR (Capex) Point 7	VMware VSphere per socket	Amendment :to VMware Vsphere- Standard Edition

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