

CORRIGENDUM - I

**REQUEST FOR PROPOSAL
FOR SUPPLY, INSTALLATION, COMMISSIONING AND MAINTENANCE OF
“ADDITIONAL ZFS STORAGE, EXADATA STORAGE AND DATABASE BACKUP
SOLUTION”
FOR EIS DEPARTMENT**



Ref: SBI/GITC/EIS/2019-20/650, Dated: 20/09/2019

**Dy. General Manager,
Enterprise Integration Services Department,
State Bank of India, Global IT Centre,
CBD Belapur, Navi Mumbai-400614.**

The following are the changes / clarification in the RFP terms. All the bidders are requested to refer the "Corrigendum" column as below.

Sl. No	RFP Page No. / Clause No.	Existing Clause	Corrigendum
1.	2 / Schedule of Events / 6. Last date and time for Bid submission	Up to 3:30PM on 15.10.2019	Up to 3:30PM on 22.10.2019
2.	2 / Schedule of Events / 8. Date and Time of opening of Technical Bids	4:30PM on 15.10.2019 Authorized representatives of Bidders may be present during opening of the Technical Bids. However, Technical Bids would be opened even in the absence of any or all of the Bidder representatives.	4:30PM on 22.10.2019 Authorized representatives of Bidders may be present during opening of the Technical Bids. However, Technical Bids would be opened even in the absence of any or all of the Bidder representatives.
3.	48/ Appendix-C, Technical & Functional Specifications, Sl. No. 1, Backup & Recovery	Proposed Appliance must be flexible to Backup and Recover Exadata Database version 12c R2 or later by continuously sending redo directly from in-memory log buffers to the Appliance automatically	Proposed Appliance must be flexible to Backup and Recover Exadata Database version 12c R2 and later.
4.	48/ Appendix-C, Technical & Functional Specifications, Sl. No. 1, Backup & Recovery	Bidder should provide a single Integrated Stack - Backup Solution (comprising of Compute / Controller, storage / enclosure, networking, and software components) that is integrated, optimized and tuned to provide maximum performance, scalability, and efficiency for business applications	Bidder should provide a Backup Solution (comprising of Compute / Controller, storage / enclosure, networking, and software components) that can be integrated, optimized and tuned to provide maximum performance, scalability, and efficiency for business applications. The bidder shall arrange for yearly review of the deployed solution by the OEM SME. A report consisting of reviews and recommendations shall be submitted to Bank prior to the installation & configuration sign-off and every year thereafter.
5.	49/ Appendix-C, Technical & Functional Specifications, Sl. No. 1, Backup & Recovery	Must ensure real-time Exadata Database redo transport sent from target Database shared memory to minimize overhead of Production system Proposed solution must validate the incoming changed data blocks, must do compression, indexes and store	The backup appliance will provide a mount point for the database systems, where a copy of redo logs will be written upon archival. The archive log copy on the Backup appliance will ensure full redundancy with zero data loss while backing up, and will

		<p>them thereby providing foundation for pointer-based space-efficient backups as point-in-time of an incremental backup</p> <p>The data should be validated while being backed up to ensure the recovery. The recovery state of the backup should be visible in the backup monitoring tool. Proposed Appliance must support Agent-less backup</p>	also enable Bank to maintain multiple copies of backup for compliance
6.	49/ Appendix-C, Technical & Functional Specifications, Sl. No. 1, Backup & Recovery	<p>The system should have an integrated management and monitoring tool for entire stack i.e. server, storage, network, software. The complete Integrated Stack System should be monitored & managed by single tool.</p>	<p>The backup solution should have an integrated management and monitoring tool for entire stack i.e. backup software and backup appliance. The complete backup solution should be monitored & managed by a single OEM tool.</p>
7.	49/ Appendix-C, Technical & Functional Specifications, Sl. No. 1, Backup & Recovery	<p>Proposed Appliance must be intelligent to</p> <ul style="list-style-type: none"> • Manage Database Space based on SBI's business defined recovery windows • Appliance must dynamically reallocate storage across databases to meet SBI's Recovery Window goals • Perform periodic inspections of the underlying hard disks. If bad sectors are detected, they are immediately repaired from a mirrored copy • The backup solution should be able to detect the corruption while taking backup • The backup solution should be able to valid the stored backup regularly 	<p>Proposed Appliance must be intelligent to</p> <ul style="list-style-type: none"> • Manage Database Space based on SBI's business defined recovery windows • Backup Solution must have the functionality to maintain the integrity and consistency of the backup data automatically without any manual intervention. • The backup solution should be able to detect the corruption while taking backup • The backup solution should be able to valid the stored backup regularly
8.	50/ Appendix-C, Technical & Functional Specifications, Sl. No. 1, Backup & Recovery	<p>Proposed Backup Appliance must have following components</p> <ul style="list-style-type: none"> - 2 Controller Node and each node having minimum • 2 x 24-core Intel Xeon 8260 (2.4GHz), 384 GB Memory or higher - Minimum 9 Storage Servers / Enclosure must be quoted, each having • 2 x 16-core Intel Xeon 5218 processors (2.3GHz) or higher • 192 GB Memory, 2 x PCI flash cards or higher 	<p>Proposed Backup Appliance must have following components -</p> <ul style="list-style-type: none"> a) Two (2 nos.) Controller Nodes with minimum 1.5 PB raw storage for storing Database Backups in total or minimum 500 TB usable storage with triple redundancy or higher. b) Redundant Hot-Swappable Power Supply c) Should Support Redundant 40G InfiniBand / 10G / 25G Ethernet Ports.

		<ul style="list-style-type: none"> • minimum 1.5 PB raw storage for storing Database Backups • Redundant Hot-Swappable Power Supply, Integrated Lights Out Manager (ILOM) • Should Support Redundant 40G InfiniBand / 10G / 25G Ethernet Ports 	d) Should have minimum throughput of 12TB/Hour or better for backup and restoration.
9.	50/ Appendix-C, Technical & Functional Specifications, Sl. No. 1, Backup & Recovery	<p>Proposed Backup Appliance must include following minimum feature to</p> <ul style="list-style-type: none"> • Automate, offload full and incremental backups to tape • Completely eliminate the impact of tape backup on production SBI SI databases • Minimum 32Gb Fibre Channel Adapters for data transfer directly to tape library • Vendors must include Backup media management software licensed for supported capacity • Replication to a remote Appliance for protection against site outages or regional disasters • Any software required for purpose of product functioning, must be provided along with the Backup appliance • Bank would provide Single rack space at each location along with necessary Datacenter pre-requisites 	<p>Proposed Backup Appliance must include following minimum feature to</p> <ul style="list-style-type: none"> • Automate, offload full and incremental backups to tape • Completely eliminate the impact of tape backup on production SBI SI databases • Minimum 16/32Gb Fibre Channel Adapters for data transfer directly to tape library • Vendors must include Backup media management software licensed for supported capacity • Replication to a remote Appliance for protection against site outages or regional disasters • Any software required for purpose of product functioning, must be provided along with the Backup appliance • Bank would provide Single rack space at each location along with necessary Datacenter pre-requisites
10.	51/ Appendix-C, Technical & Functional Specifications, Sl. No. 1, Tape Library	Bidders must provide rack mountable and scalable Tape Library with 30 LTO8 barcoded fresh Tapes. (including 5 head cleaning tapes)	Bidders must provide rack mountable and scalable Tape Library with 30 LTO-7/LTO-8 barcoded fresh Tapes. (including 5 head cleaning tapes)
11.	56/ Appendix-E, SL no. 14, Payment schedule, point No. 3.	Cost of Warranty and comprehensive AMC will be paid on quarterly in arrears.	Can be considered against Bank Guarantee from a scheduled commercial bank other than SBI, for an equivalent amount.

*** End of Corrigendum ***