CORRIGENDA AGAINST REQUEST FOR PROPOSAL

for

Selection of Master System Integrator (MSI)

to

Design, Develop, Implement and Maintain Integrated Command & Control Centre (ICCC) platform on Cloud-based DC & DR, establish local data centre, viewing centres and field infrastructure, network connectivity for 3 Smart Cities (Amritsar, Jalandhar, and Sultanpur Lodhi) of Punjab (PMIDC/Common RFP /Feb/2021/1)

- **Last date for submission of bid documents is extended upto 05th May, 2021. Please note that this is the last extension.**
- **No further queries shall be entertained.**

S.No.	Document	Corrigendum Page No.	Corrigendum Clauses	Clarification / Corrigendum
1.	Corrigendum: Volume-II (Part-A)	11	Solution should have Firewall, Anti-Malware, Deep Packet Inspection with HIPS, Integrity Monitoring, log inspection, application control and Recommended scan in single module or an in single agent	Solution should have Firewall, Anti-Malware, Integrity Monitoring, log inspection, application control and Recommended scan in single module or an in single agent
2.	Corrigendum: Volume-II (Part-A)	16	Specification for Virtual Security Information and Event Management	Please refer Annexure – A of Corrigendum No. 5
3.	Corrigendum: Volume-II (Part-E) (S. No 10)	3	PE IEEE 802.3af / POE+ IEEE 902.3at compliant	PE IEEE 802.3af / POE+ IEEE 802.3at compliant
4.	Corrigendum: Volume-II (Part-E) (S. No 33)	6	The switch should provide Minimum 16 port or 2 X 8 Ports of 10/100/1000 Mbps GE ports and 2 GE SFP uplinks Ports or more. Should be proposed with ruggedized transceivers as per solution. The switch shall be DC powered. Should support minimum 20 Gbps or more, full duplex wire rate switching throughput	The switch should provide Minimum 16 port or 2 X 8 Ports of 10/100/1000 Mbps GE ports and 2/4 GE SFP uplinks Ports. Should be proposed with ruggedized transceivers as per solution. The switch shall be DC powered. Should support minimum 20 Gbps or more, full duplex wire rate switching throughput
5.	Corrigendum: Volume-II (Part-E) (S. No. 40)	7	The switch should provide Minimum 16 port or 2 X 8 Ports of 10/100/1000 Mbps GE ports and 2 GE SFP uplinks Ports or more. Should be proposed with ruggedized transceivers as per solution. The switch shall be DC powered. Should support minimum 20 Gbps or more, full duplex wire rate switching throughput	The switch should provide Minimum 8 Ports of 10/100/1000 Mbps GE ports and 2/4 GE SFP uplinks Ports. Should be proposed with ruggedized transceivers as per solution. The switch shall be DC powered. Should support minimum 20 Gbps or more, full duplex wire rate switching throughput
6.	Corrigendum: Volume-II (Part-E) (S.No. 75)	14	Chassis should have enough redundant 20/25gb based converged modules / ports to provide a minimum FCOE uplink bandwidth of 40/50Gbps per blade server and 20/25Gbps sustained per blade server (with 1 module/port failure) for a fully populated chassis for converged Traffic.	Converged Module - Chassis should have sufficient number of redundant converged FCOE modules or ports to provide a FCOE uplink bandwidth of minimum 20Gbps per blade server and 10Gbps or higher sustained per blade server (with 1 module or port failure) for a fully populated chassis for converged Traffic.
7.	Corrigendum: Volume-II (Part-E) (S.No. 74)	14	Chassis should have enough redundant 20/25gb based converged modules / ports to provide a minimum FCOE uplink bandwidth of 40/50Gbps per blade server and 20/25Gbps sustained per blade server (with 1 module/port failure) for a fully populated chassis for converged Traffic.	Clause stands deleted

S.No.	Document	Section No.	Clause No. (if any)	Page No.	Original Clauses	Clarification / Corrigendum
1.	RFP: Volume-II (Part-A)	3.4 Minimum Technical Specification Software	3.4.1 Enterprise Management System (EMS)	37	90. The proposed helpdesk system shall support ITIL processes like request management, problem management, configuration management and change order management with out-of-the-box templates for various ITIL service support processes.	90. The proposed helpdesk system support minimum 10 or more ITIL processes with out-of-the-box templates for various ITIL service support processes like Incident Management, Service Level Management, request management, problem management, Service catalogue, configuration management, and change order management etc. The copy of the certification is required to be submitted for the above.
2.	RFP: Volume-II (Part-A)	4 Common Cloud based DC and DR	4.1.5 Service Management and provisioning	54	II. Cloud Management interface should have the ability to unilaterally provision and de-provision the specific IaaS services contemplated by the project via Web Portal, Command Line Interface and Web Services Application Programming Interface ("API"). All the communication for these purposes should be secured at transport level using SSL / TLS and or SSH.	Clause stands deleted
3.	RFP: Volume-II	6.7 Virtualization	-	47	6.7 Virtualization Software	Section stands deleted

S.No.	Document	Section No.	Clause No. (if any)	Page No.	Original Clauses	Clarification / Corrigendum
	(Part-C)	Software				
4.	RFP: Volume-II (Part-D)	4 - Minimum Technical Specifications	4.2.1.1. - SAN Storage	72	Bidder is expected to provide Unified Storage solution should have block and file access with host connectivity for FC, iSCSI, CIFS and NFS. Storage should have the capability to scale up and scale-out. The unified storage solution must be dedicated appliance with specifically optimized OS to provide both SAN and NAS functionalities. Proposed storage system must have minimum 2 Unified controllers. The all proposed All Flash storage system should be categorized as All Flash Array/Solid State Array by the OEM & optimised for Solid State Drives (SSDs).	Bidder is expected to provide Unified Storage solution should have block and file access with host connectivity for FC, iSCSI, CIFS and NFS. Storage should have the capability to **scale up or scale-out**. The unified storage solution must be dedicated appliance with specifically optimized OS to provide both SAN and NAS functionalities. Proposed storage system must have minimum 2 Unified controllers. The all proposed All Flash storage system should be categorized as All Flash Array/Solid State Array by the OEM & optimised for Solid State Drives (SSDs).
5.	RFP: Volume-II (Part-D)	4 - Minimum Technical Specifications	4.2.1.1. - SAN Storage	72	Proposed make of Unified All Flash storage system should be from reputed brands of Storage System's OEM. For investment rationalization, the proposed Unified All Flash storage system should be modular & scalable in nature wherein the Storage can be scaled by adding capacity to the controllers & controllers to the FC SAN & IP SAN fabric as well IP NAS network with all the proposed controllers managed from a One single GUI based management Interface. All requirements specified are minimum.	Proposed make of Unified All Flash storage system should be from reputed brands of Storage System's OEM. For investment rationalization, the proposed Unified All Flash storage system should be modular & scalable in nature wherein the Storage can be scaled by adding capacity to the controllers & **adding / upgrading** controllers to the FC SAN & IP SAN fabric as well IP NAS network with all the proposed controllers managed from a One single GUI based management Interface. All requirements specified are minimum.
6.	RFP: Volume-II (Part-E)	1 - Surveillance Components	1.6. - Industrial grade Field Layer-2 FE 16 port POE Switch	15	3. Switch should have minimum 200W PoE power available or extra power injector should be provided	3. Switch should have minimum **150W PoE** power available or extra power injector should be provided
7.	RFP: Volume-II (Part-E)	2 - City Datacentre Active Infra Equipment's	2.4. - Internet Firewall	22	6. Firewall should support at least 18,00,000 concurrent sessions	6. Firewall should support minimum 18,00,000 concurrent sessions scalable up to 36,00,000 concurrent sessions
8.	RFP: Volume-II (Part-E)	2 - City Datacentre Active Infra Equipment's	2.5. - Intranet Firewall	24	2. The appliance should support at least 4x1G Ethernet Ports & 4 X 10G ports with multi-mode transceiver from day one	2. The appliance should support at least 4x1G Ethernet Ports (scalable to 8 X 1G) & 4 X 10G ports (scalable to 8 X 10G) with multi-mode transceiver from day one
9.	RFP: Volume-II (Part-E)	2 - City Datacentre Active Infra Equipment's	2.5. - Intranet Firewall	24	5. Firewall should support at least 25,00,000 concurrent sessions	5. Firewall should support minimum 25,00,000 concurrent sessions scalable upto 50,00,000 concurrent sessions
10.	RFP: Volume-II (Part-E)	2 - City Datacentre Active Infra Equipment's	2.6. - Network Intrusion Prevention System	26	2. The hardware should have minimum of 8x1G ports.	The hardware should have minimum of 4x1G/10G ports and 4X10G SFP/ SFP+ (populated) ports
11.	RFP: Volume-II (Part-E)	2 - City Datacentre Active Infra Equipment's	2.10. - Unified storage with SAN Switch (75TB for Video and Application Data)	33	2. Bidder is expected to provide Unified Storage solution should have block and file access with host connectivity for FC, iSCSI, CIFS and NFS. Storage should have the capability to scale up and scale-out. The unified storage solution must be dedicated appliance with specifically optimized OS to provide both SAN and NAS functionalities. Proposed storage system must have minimum 2 Unified controllers. The all proposed All Flash storage system should be categorized as All Flash Array/Solid State Array by the OEM & optimised for Solid State Drives (SSDs).	2. Bidder is expected to provide Unified Storage solution should have block and file access with host connectivity for FC, iSCSI, CIFS and NFS. Storage should have the capability to **scale up or scale-out**. The unified storage solution must be dedicated appliance with specifically optimized OS to provide both SAN and NAS functionalities. Proposed storage system must have minimum 2 Unified controllers. The all proposed All Flash storage system should be categorized as All Flash Array/Solid State Array by the OEM & optimised for Solid State Drives (SSDs).

1. Annexure A: Virtual Security Information and Event Management

S. No	Parameter/ requirement	Minimum Specifications/requirements	Compliance (Yes/No)
1.	General	Next generation SIEM platform should encompass log, packet and end point data with added context and threat Intelligence. Should provide complete network visibility through deep packet inspection or any other analysing method, high speed packet capture and security analysis	
2.	General	The solution should be a software/virtual form factor with following dedicated components:	
		a. Management & Reporting	
		b. Normalization and Indexing	
		c. Correlation Engine	
		d. Data Management for logs and packets	
3.	General	There should be no limitation on number of devices to be supported. Any addition in no. of devices should have no cost impact on department. Solution should support more than 350 integrations out of the box for monitoring the complete environment	
4.	General	The solution should provide an integrated dashboard and incident analysis system that could provide a single view into all the analysis performed across all the different data sources including but not limited to logs, endpoint, and packets. It should have role-based access control mechanism and handle the entire security incident lifecycle	
5.	General	Real time contextual information should be used at collection/normalization layer and be available at correlation layer where any events are matched during correlation rule processing.	
6.	General	All logs that are collected should be studied for completeness of information required, reporting, analysis and requisite data enhancement, normalization should be performed to meet the reporting and analysis needs. SIEM for logs and deep packet inspection should be from same OEM	
7.	General	Software/virtual solution should support minimum 15,000 EPS scalable upto 25,000 EPS without queuing or dropping any logs.	
8.	General	The solution should be storing both raw logs as well as normalized logs. The same should be made available for analysis and reporting. Solution should be sized to provide online storage for 1 year at central site.	
9.	General	The monitoring should be cross device and cross vendor and be both out of the box and scalable to cover additional devices and applications as required	
10.	General	Should be able to provide complete packet-by-packet details pertaining to one or more session of interest including Session replay, page construction, image views	
11.	General	Should provide comprehensive deep packet inspection (DPI) or any other analysing method to classify protocols & application	
12.	General	The solution must be able to detect malicious payload in network traffic • Detect and reconstruct files back to its original type • Detect hidden or embedded files • Complete session reconstruction with support for latest HTTP/2 protocol	
13.	General	The solution must have the ability to capture network traffic and import PCAP files using the same infrastructure	
14.	General	Solution should analyse following file application types and alert in case of anomalies/various security threats: a. Web pages: HTML, HTTP--GET, HTTP--POST, HTTP--RESP, etc. b. Email and attachments: EML, etc. c. Document files: DOC, DOCX, XLS, XLSX, PPT, PPTX, PDF, WPD, etc. d. Images: JPG, BMP, GIF, PNG, etc. e. Config, system files: REG, DLL, CONF, CPP, ELF, EXE, etc. f. Compressed archives: ZIP, GZIP, RAR, etc.	
15.	General	Should store normalized packet data and correlate that with logs in the correlation engine to find threats such as: 1. Encrypted tunnels 2. Extract exe/pdf/JavaScript/malicious files for analysis 3. Full session reconstruction	