

Citizen Investment Trust
New Baneshwor, Kathmandu, Nepal
Addendum Notice No. 1

This is to notify all concerned that the Citizen Investment Trust, New Baneshwor, Kathmandu, Nepal has made the following amendments to the Bid Document for the Supply, Delivery, Installation and Commissioning of Data Center in CIT New Building, IFB No. CIT/GOODS/NCB-3/078/79 as per the notices published on Ashoj 20, 2078 (October 06, 2021) in the "Gorkhapatra" national daily newspaper and www.bolpatra.gov.np/egp.

S.No.	Reference	Existing wordings in the Bid document	Amended as
1	Page no. 33, Qualification Criteria : (e) The minimum supply value of goods under a single contract within the last three years should be as NRs 30,000,000 (In case of JV, at least one partner must meet the requirement).	The minimum supply value of goods under a single contract within the last three years should be as NRs 30,000,000 (In case of JV, at least one partner must meet the requirement).	The minimum supply value of goods under a single contract within the last three years should be as NRs 20,000,000 (In case of JV, at least one partner must meet the requirement).
2	Page No. 57, Section V : Schedule of Requirement Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories	Paragraph 4 : Must have min 210U usable space (5 racks), to accommodate IT and network equipment & devices. This footprint should include separate panel housing fire suppression and power distribution preferably.	Must have minimum 210 U space including UPS and monitoring system (5 racks), to accommodate IT and network equipment & devices. This footprint should include separate panel housing fire suppression and power distribution preferably.
3	Page No. 58, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10	Paragraph 1 : Precision Air conditioner with variable capacity cooling, heater and humidifier to cater IT load approximately 2x35 KW and in N+N topology for total 5 racks.	Precision Air conditioner with variable capacity cooling, heater and humidifier to cater IT load approximately 35 KW and in N+N topology for total 5 racks."

S.No.	Reference	Existing wordings in the Bid document	Amended as
	x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories		
4	Page No. 59, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories	Racks should be manufactured by ISO9001:20015, ISO14001:2015, ISO27000:2013 & OHSAS Certified company or should have proper Environmental Health policy.	Rack manufacturer should be ISO9001, ISO14001, ISO27001 & OHSAS Certified.
5	Page No. 60, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories <ul style="list-style-type: none"> IP PDUs (Power Distribution Unit) for Racks (Each rack should have 2 PDU) Type and Qty of Outlet – C13 x 20 & C19 x 4	Type and Qty of Outlet – C13 x 20 & C19 x 4	Type and Qty of Outlet – C13 x 20 & C19 x 3
6	Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA	PDU should support USB or Ethernet Cascading up to 16 PDU	PDU should support USB or Ethernet Cascading at least 4 PDU.

S.No.	Reference	Existing wordings in the Bid document	Amended as
	<p>Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> PDU should support USB or Ethernet Cascading up to 16 PDU 		
7	<p>Page No. 67, Technical Specification of Precision Air Conditioner (PAC)</p> <ul style="list-style-type: none"> Casing: The Casing of the Unit shall be of frame and Panel type constructed out of corrosion resistant CRCA sheet and modular construction with aluminum based railings and hinged doors. 	<p>Casing: The Casing of the Unit shall be of frame and Panel type constructed out of corrosion resistant CRCA sheet and modular construction with aluminum based railings and hinged doors.</p>	<p>Casing: The Casing of the Unit shall be of frame and Panel type constructed out of corrosion resistant CRCA sheet and modular construction based railings and hinged doors.</p>
8	<p>Page No. 79, Technical Specification of Diesel Generator, Table, 6 th Row</p>	<p>125 KVA Three Phase Silent Diesel Generator set with automatic (AMF) control panel and remote monitoring system (RMS), civil work for foundation, cabling, exhaust system etc.</p>	<p>125 KVA Three Phase Silent Diesel Generator set with automatic (AMF) control panel and remote monitoring system (RMS), civil work for foundation, cabling, exhaust system, Shed, at least 500 Lt metal fuel tank etc.</p>

Executive Director
02 November 2021

Citizen Investment Trust
New Baneshwor, Kathmandu, Nepal
Clarification No. 1

This is to notify all concerned that the Citizen Investment Trust, New Baneshwor, Kathmandu, Nepal has made following clarifications on the queries of bidders to the Bid Document for the Supply, Delivery, Installation and Commissioning of Data Center in CIT New Building, IFB No. CIT/GOODS/NCB-3/078/79 as per the notices published on Ashoj 20, 2078 (October 06, 2021) in the "Gorkhapatra" national daily newspaper and www.bolpatra.gov.np/egp.

S.No.	Reference	Queries of the bidders	Response from the Purchaser
1	<p>Page No. 28 & 57-110, Section II. Bid Data Sheet & Section V Schedule of Requirement, ITB 19.2 & 3. Technical Specifications</p> <p>Bid Data Sheet : A Manufacturer's Authorization (MAF) or Distributor's Authorization letter is required for the following items:</p> <ul style="list-style-type: none"> • PAC (Precision Air Conditioner) • PDU (Power Distribution Unit) • Rack • UPS (Uninterrupted Power Supply) • Battery • Generator <p>Technical Specifications: A Manufacturer's Authorization (MAF) or Distributor's Authorization letter is required for all the components mentioned in technical specifications.</p>	<p>Modular Data Center Infrastructure comprises of PAC, PDU, Rack, UPS, Batter, DCIM, Water leak detection, automatic rodent repellent, Fire detection and suppression, access control.</p> <p>Hence, we request for your clarification, if Manufacturer's Authorization letter (MAF) can be submit from Modular Data Center infrastructure OEM for these components will be valid.</p> <p>Also, we request you to confirm, if we need to submit Manufacturer Authorization letter for entire components mentioned in Technical specifications.</p>	<p>Bidder must submit Manufacturer's Authorization (MAF) or Distributor's Authorization letter for entire components as specified in Bid Data Sheet ITB 19.2 either from single or multiple manufacturer/distributor.</p>
2	<p>Page no. 33, Qualification Criteria : (e) The minimum supply value of goods under a single contract within the last three years should be as NRs 30,000,000 (In case of JV, at least one partner must meet the requirement).</p>	<p>The e) and f) clauses states same value for single project and yearly turnover. Either single project value or yearly turnover value should be differentiated.</p> <p>Request to decrease the single project value.</p>	<p>Single project value has been decreased as referred to addendum notice no 1.</p>

3	Page no. 33, Qualification Criteria : (f) The minimum average annual turnover during the last three years should be in NRs 30,000,000 (In case of JV, at least one partner must meet the 40 percent of the total requirement, other partners must meet at least 25 percent of the total requirement and all partners combined must meet the total requirement.)	The e) and f) clauses states same value for single project and yearly turnover. Either single project value or yearly turnover value should be differentiated. Request to decrease the single project value.	Please refer to Bid Document.
4	Page No. 51 & 79-83, Schedule of Requirement, 1. List of Goods and Related Services & 3. Technical Specifications 5.5 Diesel Generator 125 KVA 5.6 Automatic Voltage Stabilizer : 250 KVA and Manual Change Over Switch	We request you for your clarification regarding the different capacity of AVR and Diesel Generator.	Please refer to Bid Document.
5	Page No. 57, Section V : Schedule of Requirement Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories Paragraph 4 : Must have min 210U usable space (5 racks), to accommodate IT and network equipment & devices. This footprint should include separate panel housing fire suppression and power distribution preferably.	Maximum usable space available (42U*5=210U) For UPS to be rack mountable space requirement is 9U (4U/UPS + 1U for rack monitoring system). So usable space available will be approx. 200U. <u>Queries:</u> Rack mounted UPS and DCIM are housed/ placed inside Modular Data Center Infrastructure. Approx., 10U space are consumed by UPS and DCIM. Hence, we request to confirm the U Space requirements.	Please refer to Addendum Notice No. 1.
6	Page No. 58, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories <ul style="list-style-type: none"> • 2 x 40 KVA Online UPS with P.F. up to 0.9 & efficiency 90% ~95%. There should be 60 min battery back-up of each battery Bank (Combined 120 mins). Battery should be placed in Power Room only. 	Please state at what load level/percentage , the backup time 60 min should be matched. IT load value	The backup time of minimum 60 min is required at full load for each UPS.

7	<p>Page No. 58, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • Paragraph 1 : Precision Air conditioner with variable capacity cooling, heater and humidifier to cater IT load approximately 2x35 KW and in N+N topology for total 5 racks. 	<p><u>Queries:</u> Request you to confirm whether the clause is "Precision Air conditioner with variable capacity cooling, heater and humidifier to cater IT load approximately 35 KW and in N+N topology for total 5 racks." Or "Precision Air conditioner with variable capacity cooling, heater and humidifier to cater IT load approximately 2x35 KW and in N+N topology for total 5 racks."</p>	Please refer to Addendum Notice No. 1.
8	<p>Page No. 59, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • Racks should be manufactured by ISO9001:20015, ISO14001:2015, ISO27000:2013 & OHSAS Certified company or should have proper Environmental Health policy. 	<p>Request to modify as "OEM or Manufacturer should be ISO 9001: 2000, ISO 14001, OHSAS 45001:2018 certified. To make the spec generic</p>	Please refer to Addendum Notice No. 1.
9	<p>Page No. 59, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • Grounding and bonding should be as per UL Standards 	<p>Mention as "Each rack shall have proper earthing arrangement." for more safety of rack equipments.</p>	Please refer to Bid Document.
10	<p>Page No. 60, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • Biometric access control system which should be control by access control panel. 	<p>Request to modify as "HID Access control system shall be provided."</p>	Please refer to Bid Document.
11	Page No. 60, Technical Specification of Modular Data	Request to modify as "Type and Qty of	Please refer to

	<p>Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • IP PDUs (Power Distribution Unit) for Racks (Each rack should have 2 PDU) • Type and Qty of Outlet – C13 x 20 & C19 x 4 	Outlet – Minimum C13 x 21 & C19 x 3"	Addendum Notice No. 1.
12	<p>Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • PDU should have 2 x10/100 mbps Network Ports 	<p>[Query 1]:- PDU should have network capabilities to monitor remotely.</p> <p>[Query 2]:- PDU should have minimum 1 x10/100 mbps Network Port" to be more generic. Since, network port is for remote access and monitoring purpose only</p>	Please refer to Bid Document. Requirement of 2 Network ports are required for cascading and monitoring purpose
13	<p>Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • PDU should support USB or Ethernet Cascading up to 16 PDU 	<p>[Query 1]:- PDU should have feature of cascading.</p> <p>[Query 2]:- mention as "PDU should Ethernet Cascading up to 4 PDU's".</p>	Please refer to Addendum Notice No. 1.
14	<p>Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • Intelligent PDU should offer real-time remote power monitoring of power at the inlet: RMS current per line, RMS voltage, Apparent and Active power (kVA, kW), Power Factor (PF) and Energy consumption (kWh) 	Mention as "Intelligent PDU should provide following measurement parameters: Current (A), voltage (V), real power (W) and consumption (kWh)".	Please refer to Bid Document.
15	Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online	Mention as "PDU should have field replaceable controller, so that the complete	Please refer to Bid Document.

	<p>UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • PDU should have field replaceable controller to avoid downtime in case of maintenance. 	PDU is not required to be sent back to OEM".	
16	<p>Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • PDU should support both Port-forwarding and Bridge Protocols for accessing the cascaded PDUs. 	Mention as "PDU should have Network Port Sharing feature".	Please refer to Bid Document.
17	<p>Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • PDU should provide power information from Line and CB. 	Mention as "PDU should provide power information at the socket level."	Please refer to Bid Document.
18	<p>Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • PDU should have LCD/LED Display for at the rack display of the power information from Line and CB. 	Mention as "PDU should have Load Indicator LED's to indicate the status of the Rack PDU Load."	Please refer to Bid Document.
19	<p>Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> • Intelligent PDU should ensure to support data report when a break in the network chain occurs. support minimum 35 PDUS 	Mention as "PDU should support event log feature."	Please refer to Bid Document.
20	Page No. 61, Technical Specification of Modular Data	Mention "Data provided by the PDUs	Please refer to Bid

	<p>Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> Data provided by the PDUs should be of billing grade accuracy i.e. +/- 1% 	should be of billing grade accuracy i.e. +/- 3%."	Document.
21	<p>Page No. 61, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> PDU should support connecting minimum 16 Environmental Sensors using appropriate Hardware/Hubs. 	Mention as "Each PDU sensor port should support Temperature & Humidity sensor".	Please refer to Bid Document.
22	<p>Page No. 62, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> PDU should have Circuit Breaker Trip Alarming feature. 	Mention as "PDU should generate working in case of detection of low load threshold."	Please refer to Bid Document.
23	<p>Page No. 62, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> PDU should support variety of access protocols including HTTP, HTTPS, NTP, SMTP, SSH, SNMP v1, v2 and v3, TACACS+, RSTP etc 	Mention as "PDU should support variety of access protocols including HTTP, HTTPS, NTP, SMTP, SSH, SNMP v1 and v3" to be more generic instead of specific	Please refer to Bid Document.
24	<p>Page No. 62, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> PDU should support integration with LDAP/LDAPs and AD for secure authentication. 	<p>Query [1]: Please remove this clause.</p> <p>Normally, PDU are not member of LDAP/AD.</p> <p>Query [2]: Mention as "PDU should support LDAP or</p>	Please refer to Bid Document.

		LDAPs or AD for secure authentication or SHA or MD5 authentication and AES and DES encryption".	
25	<p>Page No. 65, Technical Specification of Modular Data Center with 5 Racks, 2 x 35 KW PACs, 2 x 40KVA Online UPS, Standard Battery combined Backup of 2 hrs, 10 x IP PDUs, Sensors, Aisles Concept, Blanking Panels & Accessories</p> <ul style="list-style-type: none"> Output Power Capacity: At Least $\pm 1\%$, 30 KW/30 KVA 	<p>UPS capacity is 40 KVA or 30 KVA? What should be PF of UPS?</p>	Please refer to Bid Document.
26	<p>Page No. 66, Technical Specification</p> <ul style="list-style-type: none"> The proposed goods should have three (3) years warranty or standard manufacturer warranty period on parts replacement whichever is greater. 	3 years warranty only for UPS or for both UPS and batteries?	At least three (3) years warranty is required for both UPS and Batteries. Please refer to Bid Document.
27	<p>Page No. 66, 3. Technical Specification</p> <ul style="list-style-type: none"> Backup Time: 60 mins for each UPS 	At what power factor should it be designed?	Please refer to Bid Document.
28	<p>Page No. 66, 3. Technical Specification</p> <ul style="list-style-type: none"> Battery Type: External – Sealed Maintenance Free 	Any Aging Factor or design margin needs to be considered?	Please refer to Bid Document.
29	<p>Page No. 67, Technical Specification of Precision Air Conditioner (PAC)</p> <ul style="list-style-type: none"> Casing: The Casing of the Unit shall be of frame and Panel type constructed out of corrosion resistant CRCA sheet and modular construction with aluminum based railings and hinged doors. 	<p>Providing CRCA sheet material for railings and hinged doors are much better than aluminum. Request you to confirm, if CRCA sheet based railings and hinged doors will be accepted</p>	Please refer to Addendum Notice No. 1.
30	Page No. 75, Technical Specification of Electrical Goods	Electrical Main Distribution Board (EMDB) Please state where will be EMDB provisioned to install ?	It will be finalized during survey/installation time.
31	<p>Page No. 75 & 77, Section V Schedule of Requirement, Technical Specification of Electrical Goods</p> <ul style="list-style-type: none"> c) Sub-Distribution Board (SDB): Paragraph 6 <p>Power point cabling or AC of 15 points with copper cable 4Sq mm, 1.5 Sq. mm, PVC Conduits, pipe cabling</p>	<p>Total power points cabling required as per both of the clause is 40 points.</p> <p><u>Queries:</u> Request you to provide us the location details for the power point cabling if</p>	It will be finalized during survey/installation time.

	<p>accessories and cabling charge. 3/3 power sockets with PVC boxes are required for the job.</p> <p>&</p> <p>Paragraph 2</p> <p>Aside, CIT will require Power point cabling or AC of 25 points with copper cable 4mm -2, 1.5 mm -1, PVC Conduits, pipe cabling accessories and cabling charge. 3/3 power sockets with PVC boxes are required for the job.</p>	possible.	
32	Page No. 79, Technical Specification of Diesel Generator	Do we have to provide/consider fuel tank and shade for Genset ?	Please refer to Bid Addendum Notice No. 1.
33	<p>Page No. 79, Section V Schedule of Requirement, Technical Specification of Diesel Generator</p> <p>Paragraph 5</p> <ul style="list-style-type: none"> Overall Dimensions with canopy (L X W X H in mm): To be specified by bidder 	<p>As per the survey, the present designated place for generator placement is not sufficient.</p> <p><u>Suggestion:</u></p> <p>We suggest CIT to reconsider the present designated place for the generator placement.</p>	Exact location details will be provided to successful bidder during implementation considering distance will not exceed 75 meters. Please, visit the site location.
34	<p>Page No. 94, Technical Specification of IP Surveillance</p> <ul style="list-style-type: none"> The camera should have Micro SD card support. 	<p>Can this clause be removed?</p> <p>As NVR is being used to store the record, camera with SD card support may not be required.</p>	Please refer to Bid Document.
35	<p>Page No 114, Technical Specification of In-house Network Expert</p> <ul style="list-style-type: none"> S/he should have valid CCNA certificate. 	Instead of valid CCNA certificate, please mention as CCNA certified with minimum 2 years work experience in relate.	Please refer to Bid Document.

Executive Director
02 November 2021