



Northern Electricity Supply PLC
(An Enterprise of Bangladesh Power Development Board)
Office of the Superintending Engineer (Procurement)
Head Office, Bidyut Bhaban, Hetem Khan, Rajshahi
Web: www.nesco.gov.bd

Reference NO. 27.29.0000.129.07.001.24-09

Date: 23-09-2024

Name of Project: "Network Infrastructure Development and Modernization of Power Distribution System in NESCO Area"
Title of Contract: "Design, Supply, Installation, Testing, and Commissioning of Data Center Extension, Disaster Recovery Center and Cybersecurity Operation Center and related Services at NESCO"
Package No.: Package-1
IFB No.: 27.29.0000.007.07.001.24.70, Date: 01-07-2024

Bid Bulletin No. 2

[Date of Issue- 23/09/2024]

NESCO, the Employer, advises bidders of the following **amendment(s) to the Bidding Document/IFB captioned above.**

Sr. No.	Reference	Original Clause/Sub-Clause	Amended Clause/Sub-Clause/Item
1.	Instructions to Bidders (ITB) Data Sheet 24.1	The deadline for bid submission is: Date: 30 September, 2024 Time: 11:00 Hours Local Time (Bangladesh Time)	The deadline for bid submission is: Date: 30 October, 2024 Time: 11:00 Hours Local Time (Bangladesh Time)
2.	Instructions to Bidders (ITB) Data Sheet 27.1	The bid opening of Technical Bids shall take place at: Date: 30 September, 2024 Time: 11:30 Hours Local Time (Bangladesh Time)	The bid opening of Technical Bids shall take place at: Date: 30 October, 2024 Time: 11:30 Hours Local Time (Bangladesh Time)
3.	Section 6 – Employer's Requirement (Lot 1, Lot 2, Lot 3)	Country of origin : USA/EU/UK/CANADA/JAPAN Country of manufacturer : USA/EU/UK/CANADA/JAPAN	Country of origin : USA/EU/UK/CANADA/JAPAN or it's equivalent Country of manufacturer : USA/EU/UK/CANADA/JAPAN or it's equivalent
4.	Section 6-sub-clause-4.17 (SAN Storage)-Item No[8] (Storage Architecture) Page : 6- 181 (Lot 2)	Offered Storage must be a All Flash Storage having scale-up and scale-out architecture for SAN and NAS protocols asked, it must be configured with 2 controllers and scale to 8 or more controllers for future expansion. It must support mixing of controllers within same generation and across generation of controller models	Offered Storage must be an All-Flash end to end NVMe Storage having scale-up and scale-out architecture for SAN and NAS protocols asked, it must be configured with 2 controllers and scale to 8 or more controllers for future expansion. It must support mixing of controllers within same generation and across generation of controller models.
5.		Offered Storage must support Active-Active Symmetric Controller architecture where a LUN should be accessible by all the controllers simultaneously	Offered Storage must support Active-Active Symmetric/Asymmetric Controller architecture where a LUN should be accessible by all the controllers.
6.	Section 6-sub-clause-4.17 (SAN Storage)-Item No[9] (Cache required)	Offered Storage must be configured with minimum of processor 24 Cores across controllers. Storage must be configured with minimum 300GB DRAM based Global cache across controllers. Writes in the cache must	Offered Storage must be configured with minimum of processor 24 Cores across controllers. Storage must be configured with minimum 256GB DRAM based Global/federated cache across controllers. Writes in the cache must be

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	Page : 6- 182 (Lot 2) & Section 6 – Clause –2 (Specifications) -21. Technical Specifications of SAN Storage-Item No[9] (Cache required) Page : 6- 135 (Lot 3)	be protected in the event of unplanned power outage by de-staging to persistent storage or battery backed cache.	protected in the event of unplanned power outage by de- staging to persistent storage or battery backed cache.
7.	Section 6-sub-clause-4.17 (SAN Storage)-Item No[11] (Drive Support) Page : 6- 182 (Lot 2)	The proposed storage should support 7.6 / 15/ 30 TB or Higher capacity NVMe SSD/ All Flash Drives, Total supported NVMe drives on the storage system should be up to 24. The storage should also be able to support Hybrid configuration with 12G SAS Backend controller and SAS SSDs or SAS 10K rpm or 7.5K rpm HDDs.	The proposed storage should support 7.6 / 15/ 30 TB or Higher capacity NVMe SSD/ All Flash Drives, Total supported NVMe drives on the storage system (per HA pair) should be up to 96 drive. Minimum 100GB NVMe backend port to connect drive enclosure and deliver end to end NVMe performance.
8.	Section 6-sub-clause-4.17 (SAN Storage)-Item No[12] (Storage Performance) Page : 6- 182 (Lot 2)	Offered Storage configuration must be sized to support minimum 150k IOPS of 8KB block size (Read: Write ratio of 80:20 less than 1ms avg. latency) using NVMe Protocols along with data reduction enabled or Proposed Storage should perform equally with their preparatory IOPS count & size. The requested IOPS must be capable of delivering optimal performance at 50% utilization of the proposed storage system, bidders are required to submit a comprehensive Performance Report and Design Document as part of the proposal, serving as a reference document. Offered solution must support 4X scalability of performance by leveraging scale up and scale out architecture	Offered Storage configuration must be sized to support minimum 150k IOPS of 8KB block size (Read: Write ratio of 80:20 less than 2ms avg. latency) using NVMe Protocols along with data reduction enabled or Proposed Storage should perform equally with their preparatory IOPS count & size. The requested IOPS must be capable of delivering optimal performance at 50% utilization of the proposed storage system, bidders are required to submit a comprehensive Performance Report and Design Document as part of the proposal, serving as a reference document. Offered solution must support 4X scalability of performance by leveraging scale up and scale out architecture.
9.	Section 6 – sub-clause – 1.4 (Project Documentation Requirement) – Item No. [XVI, XVII] Page- 6-10 (Lot-1)	XVI. IA should update HLD, LLD, SLD of Data recovery centre (including Power Cabling, power requirement etc.)	XVI. Contractor should update HLD, LLD, SLD of Data centre (including Power Cabling, power requirement etc.) XVII. The Contractor shall prepare and submit comprehensive As-Built Documentation upon completion of the Data Center implementation. The As-Built Documentation must accurately reflect the final configuration and setup, including but not limited to-Detailed network infrastructure, system and electrical layouts, Cabling and rack diagrams, device configurations, including versions and licenses, Any


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			<p>deviations from the original design along with justifications, Test and commissioning results, Maintenance and operational procedures for the installed systems. The As-Built Documentation must be submitted before commissioning, and shall be subject to review and approval by the Employer.</p>
10.	<p>Section 6 – sub-clause – 2.3 (Project Documentation Requirement) – Item No. [XV, XVI] Page- 6-16 (Lot-2)</p>	<p>XV. A Handover-takeover plan needs to be listed, necessary training to be given to NESCO, its FMS team and its delegates.</p>	<p>XV. A Handover-takeover plan needs to be listed, necessary training to be given to NESCO, its FMS team and its delegates.</p> <p>XVI. The Contractor shall prepare and submit comprehensive As-Built Documentation upon completion of the Data Center implementation. The As-Built Documentation must accurately reflect the final configuration and setup, including but not limited to-Detailed network infrastructure, system and electrical layouts, Cabling and rack diagrams, device configurations, including versions and licenses, Any deviations from the original design along with justifications, Test and commissioning results, Maintenance and operational procedures for the installed systems. The As-Built Documentation must be submitted before commissioning, and shall be subject to review and approval by the Employer.</p>
11.	<p>Section 6 – sub-clause – 1.1- General Requirement & Guideline– Item No. [XVI] Page- 6-5 (Lot 3)</p>	<p>Note: Tenderer are requested to visit the site to consider all requirements before the submission of the Tender.</p>	<p>XVI. The Contractor shall prepare and submit comprehensive As-Built Documentation upon completion of the Data Center implementation. The As-Built Documentation must accurately reflect the final configuration and setup, including but not limited to-Detailed network infrastructure, system and, Cabling and rack diagrams, device and software configurations, including versions and licenses, Any deviations from the original design along with justifications, Test and commissioning results, Maintenance and operational procedures for the installed systems. The As-Built Documentation must be submitted before commissioning, and shall be subject to review and approval by the Employer.</p> <p>Note: Bidders are requested to visit the site to consider all requirements before the submission of the Bid.</p>
12.	<p>Section 6 – sub-clause – 2.4 (Spine and Core Switch)- Sl. No. [55] (Gartner or Forrester Report) Page- 6-23</p>	<p>OEM/Solution must be in the Gartner's or Forrester Leader's Quadrant report for Data Centre SDN as per the 2019/2020-year report.</p>	<p>OEM/Solution must be in the Gartner's or Forrester Leader's Quadrant report for Data Centre SDN as per the 2019/2020-year or later of the reports.</p>

Sr. No.	Reference	Original Clause/Sub-Clause	Amended Clause/Sub-Clause/Item
	(Lot 1)		
13.	Section 6 – sub-clause – 4.5 (Partner Router)- SI No. [2] (Industry Certifications and Evaluations) Page 6-131 (Lot 2)	Proposed solution must be in Leader for Wired and Wireless LAN Access Infrastructure segment in Gartner MQ-2019/2020	Proposed solution must be in Leader for Wired and Wireless LAN Access Infrastructure segment in Gartner MQ-2019/2020 or later of the Gartner report.
14.	Section 6 – sub-clause – 4.7 (Spine and Core Switch)- SI. No. [55] (Gartner or Forrester Report) Page- 6-140 (Lot 2)	OEM/Solution must be in the Gartner's or Forrester Leader's Quadrant report for Data Centre SDN as per the 2019/2020-year report.	OEM/Solution must be in the Gartner's or Forrester Leader's Quadrant report for Data Centre SDN as per the 2019/2020-year or later of the reports.
15.	Section 6 – sub-clause – 4.24 (Distribution Switch)- SI. No. [4] (Industry Certifications and Evaluations) Page 6-200 (Lot 2)	Proposed solution must be in Leader for Wired and Wireless LAN Access Infrastructure segment in Gartner MQ-2019/2020	Proposed solution must be in Leader for Wired and Wireless LAN Access Infrastructure segment in Gartner MQ-2019/2020 or later of the Gartner report.
16.	Section 6 – Clause –2 (Specifications) – 19. Technical Specifications of Server Type-1– SI No. [11] (Internal Storage) Page 6-130 (Lot 3)	2 x 800GB 2.5inch Enterprise Performance 12G SAS Kioxia G1 SSD (3X Endurance) Drive	2 x 800GB 2.5inch Enterprise Performance 12G SAS SSD

The amended clause/sub-clause or item shall replace the provision(s) in the issued Bidding Document. All other terms & conditions shall remain unchanged. Bidders shall note that the bid shall be valid at least 180 days from the extended bid submission deadline, and the bid security shall be valid at least 28 days beyond the validity of the bid in accordance with ITB Clause 20.


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