

**UbuntuNet Cloud Project**

**Supply (and support) of Cloud Infrastructure Equipment**

**Volume 2**

**Invitation To Tender (ITT)**

**Lot 2: Kampala**

**Submission Deadline: December 7, 2022**

STATUS: FINAL

|  |  |
| --- | --- |
| Date of Issue: | 07/11/2022 |
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**Foreword**

UbuntuNet Alliance reserve the rights:

* to award one or more or no contracts whatsoever as a result of this procurement process;
* to vary the bid timetable (including the content of the phases) as it considers appropriate at any time. Any material changes will be notified to the person each Bidder has nominated for contact purposes;
* to make whatever changes it sees fit to the structure or content of the procurement process, within the principles of fair, reasonable and non-discriminatory treatment of Bidders;
* to withdraw this Invitation to Tender (ITT) at any time or to re-invite Responses on the same or any alternative basis;
* to seek clarification in relation to the information submitted by the Bidders. The Bidders must respond promptly in writing; and
* to select a Response which is incomplete or not formatted in accordance with this ITT or not provided in the media required by this ITT regardless of whether other complete or more complete Responses or Responses formatted in accordance with this ITT were submitted by other Bidders.

Any expenditure, costs, liability, work or effort undertaken or incurred in proceeding and/or participating in this procurement ("Bidder Costs") is a matter solely for the commercial judgement of Bidders, and UbuntuNet Alliance will not be liable to reimburse or compensate the Bidders in respect of any of the Bidder Costs.

Information provided in response to this Invitation To Tender (ITT) may be shared with any National Research and Education Network (NREN) that is a member of the UbuntuNet Alliance and/or their professional advisors. The information will be held in confidence and used solely for the purpose of this procurement and awarding any resultant framework agreements or contract(s).

The term “Bidder” will be used to describe economic operators who respond to this Invitation to Tender.

1. **Guidance Notes for Applicants**
   1. This “Invitation to Tender (ITT)” is part two of a document set in respect of this tender procedure, which emulates the process referred to as an open procedure. Whilst this tender is not being formally conducted under the auspices of the European Commission 24/14/EC Procurement Directive[[1]](#footnote-1), the model for transparency and fair treatment of bidders (as laid out in said Procurement Directive) shall apply to the activities of the UbuntuNet and its advisors in respect of this process at all times.
   2. All tender documents are available to download from the UbuntuNet Alliance website at <https://ubuntunet.net/2022/11/supply-installation-support-cloud-infrastructure-kampala-re-advertised/>
   3. Please return a completed version of this and all documents and correspondence via email to procurement@ubuntunet.net
   4. “You”/ “Your” or “Bidder” means the body completing these questions i.e. the legal entity seeking to be invited to the next stage of the procurement process and responsible for the information provided. For the avoidance of doubt, the term ‘Bidder’ is intended to cover any economic operator as defined by the EC Procurement Directives.
   5. Bidders must ensure that all questions are completed accurately and concisely.
   6. Where a “Yes” or “No” answer is required, Bidders shall mark the relevant checkbox so as not to create ambiguity for evaluators.
   7. Information must be entered into the appropriate answer boxes except where additional documentation is required or specifically requested.
   8. Should you need to provide additional Appendices in response to the questions, these should be numbered clearly and listed as part of your declaration.
   9. Bidders must not alter any questions set out in the ITT in their response.
   10. Bidders must not cross-reference their answer to one question in their answer to another, even where there is commonality. Cross-referenced questions will not be evaluated and a score of zero / fail will be applied in that scenario.
   11. The Alliance may disregard any part of an answer to an ITT question that exceeds the word limit (where one is specified) or when a response is considered disproportionate. For example, do not submit what may be considered standard sales literature as part of your bid where it adds little or no value to the evaluation process.
   12. You may use the checklist below to confirm that all the details to the requirements in this ITT document have been sufficiently completed and/or provided.

Table 1: Bidder Checklist

|  |  |  |
| --- | --- | --- |
| No | Item | Yes/No |
| 1 | Volume 2 document complete (*the ITT document* ***MUST*** *be sufficiently completed*) |  |
| 2 | Pricing (*the pricing information (inclusive of tax) for the requested quantities is* ***MANDATORY***) – *see Table 4* |  |
| 3 | Technical specification requirements *(You* ***MUST*** *ensure that the minimum specifications of the equipment are met with evidence) – see Table 3* |  |
| 4 | Milestone (Project Plan) *(You* ***MUST*** *provide a project plan showing the lead time in days and weeks from receipt of signed Purchase Order to delivery and installation on site and should include all customs related clearance and logistical aspects.)* |  |
| 5 | Equipment Manufacturer Authorization (*You* ***MUST*** *provide a supporting document verifying authorization to distribute equipment on behalf of the manufacturer in Uganda*) |  |
| 6 | Terms and Conditions (*You* ***MUST*** *accept by signing all the pages of the terms and conditions for the supply of the equipment as documented on https://ubuntunet.net/app/uploads/2022/08/Cloud-Infrastructure-Tender-Kampala-Terms-and-Conditions-of-Contract.docx*) |  |
| 7 | Hardware Equipment Support *(You* ***MUST*** *provide a separate hardware equipment support proposal with options such as next day break fix on-site support)* |  |

1. **Background to the Requirements**
   1. This document sets out the requirements in respect of equipment (and support) for a new cloud infrastructure project for the UbuntuNet Alliance and National Research and Education Network Providers in Southern and Eastern Africa. The equipment shall be housed (and supported) in the UbuntuNet Alliance Point of Presence in Kampala, Uganda.
   2. The overall objective of AfricaConnect3 is to enhance human capital development in Africa. More specifically, it seeks to unlock the potential of education and research through increased access to digital infrastructures and technologies for African education and research institutions.
   3. The success of the AfricaConnect3 project will be measured through the consolidation and improvement of the UbuntuNet network, including the inclusion of new e-infrastructure services and the extension to newly ready countries.
   4. UbuntuNet Alliance will be taking this project forward in respect of Eastern and Southern Africa. The Alliance exists to coordinate research and education (R&E) networking in Eastern and Southern Africa on behalf of the region’s National Research and Education Networks (NRENs). It is the regional association of National Research and Education Networks (NRENs) in Africa. Initially established in 2005 by five emerging NRENs in Eastern and Southern Africa MAREN (Malawi), MoRENet, (Mozambique), KENET (Kenya), RwEdNet (Rwanda) and TENET (South Africa), its ambition was to secure high speed and affordable Internet connectivity for the African research and education community in Gb/s rather than in Kb/s.
   5. Today, the Alliance’s membership is drawn from 16 countries: The Democratic Republic of Congo, Botswana, Burundi, Ethiopia, Kenya, Madagascar, Malawi, Mozambique, Rwanda, Somalia, South Africa, Sudan, Tanzania, Uganda, Zambia and Zimbabwe and its objectives are, on a non-profit basis, to:
      1. Develop and improve the interconnectivity between Research and Education Networking (REN) Participants in Africa and their connectivity with research and education networks worldwide and with the Internet generally;
      2. Develop the knowledge and skills of ICT practitioners in these institutions; and
      3. Provide related auxiliary services to Research and Education Networking (REN) Participants.
   6. The Alliance is fully incorporated as an International Non-Governmental Organisation in Malawi.
   7. The Alliance has a requirement for server equipment in order to provide cloud-based services to its member NRENs. This acquisition is being co funded under the AfricaConnect3 project. The project, 80% funded by the European Commission (EC), will build upon the high-capacity network for research and education that has been established in the Eastern and Southern Africa (ESA) region over the last 10 years.
   8. The overall programme will increase the resilience of extant links and reach out to newly joining NRENs to the UbuntuNet Alliance from within ESA. It will support the new and improved network between the region and the worldwide community of Research and Education Networks by continuing to connect with GÉANT, the pan-European Research and Education Network.
   9. In the context of the requirements stated herein, as part of the development of its infrastructure and roll out of new applications and services to the community it serves, the UbuntuNet Alliance is developing its cloud infrastructure. To this end, the Alliance will establish its own resilient cloud server infrastructure to deliver services to member NRENs and institutes in the region.
   10. The remainder of this document sets out the evaluation criteria and requirements that bidders must satisfy. These include the technical, quality, contractual and commercial elements associated with all of the requirements as stated.
2. **Evaluation Criteria** 
   1. Bidders are required to submit responses to the questions in Volume 1 and Volume 2 of the ITT. Bidders should indicate their compliance to all the stated requirements within this ITT in order to be considered for a contract. In addition to your compliance statement, you are required to provide a narrative (and any additional evidence) that describes how your company would meet the specific requirement so that UbuntuNet Alliance can be assured of the validity of the compliance statement.
   2. Evaluation will be carried out in the following three sequential stages. A bidder is required to pass a given stage to proceed to the next:
      1. **Company Capability Assessment**: Volume 1 to this tender will be evaluated to determine the capacity of the company. This will be evaluated on a pass/fail basis. Companies must pass all sections to proceed to the Technical Evaluation.
      2. **Technical Evaluation**: Technical specifications responses will be evaluated on a pass/fail basis on whether they meet the stated requirements. Companies must pass all technical requirements sections to proceed to the Financial Evaluation.
      3. **Financial Evaluation**: For bidders who pass the technical evaluation, the financial evaluation shall be based on the bid price, with the lowest bidder being taken forward for a contract award.
3. **Technical Requirements** 
   1. **Scope**
      1. Supply and installation of cloud server equipment delivered to Raxio Uganda, Plot 781, Block 113, Namanve Industrial Park, Mukono, Uganda
      2. Technical responses from bidders that describe their proposed solution, including the licencing model where necessary, methodology and timeline of the installation as well as next day break fix support on site.
   2. **Milestone Plan**
      1. Bidders **MUST** include a milestone plan showing the lead time in days and weeks from receipt of signed Purchase Order to delivery and installation on site. This part of your response **must** include all customs related clearance and logistical aspects.
   3. **Manufacturer’s Authorisation**
      1. Bidders **MUST** provide a supporting document verifying authorization to distribute/supply equipment/solution on behalf of the manufacturer.
   4. **Project Plan**
      1. Bidders MUST provide a project plan (proposal) with the **committed** lead time in weeks from signed Purchase Order to installation on site.
   5. **Hardware Support Proposal**
      1. Bidders MUST provide a hardware equipment support proposal with options such as next day break fix on-site support.
   6. **Acceptance of the Terms and Conditions**
      1. Bidders must accept and sign UbuntuNet Alliances Terms and Conditions at <https://ubuntunet.net/app/uploads/2022/08/Cloud-Infrastructure-Tender-Kampala-Terms-and-Conditions-of-Contract.docx>. The signed form MUST be part of the tender submission.
   7. **Timing**
      1. The intended milestones are set out below (Table 2):

Table 2: Procurement Timelines

|  |  |
| --- | --- |
| Activity | Date |
| Publish ITT documents on UA website and invite Bidders to participate | 07/11/2022 |
| Deadline for submissions: | **07/12/2022** |
| Evaluation of responses | 5 days |
| Intent to award notices sent by letter  Debrief information shared with unsuccessful bidders | 06/01/2023  06/01/2023 |
| Contract awarded post 10 day “cooling off” period | 16/01/2023 |

* 1. **Technical Specifications**
     1. Set out in this section are the mandatory technical specifications for a hardware solution to meet the UbuntuNet Alliance’s minimum requirements for providing Cloud based Infrastructure services for its members.
     2. Where indicated, some requirements are listed as a specification of minimum performance requirements.
     3. The assessment shall be Pass or Fail for each specification, with the onus on the Bidder to provide sufficient evidence in their responses to prove that all claims of compliance are valid.

Table 3: Equipment Specifications

| **SPECIFICATION** | | | **Compliance [Y/N]** | **Supporting evidence** |
| --- | --- | --- | --- | --- |
| **Option** | **Description** | **Quantity required** | **Compliance [Y/N]** |  |
| **Compute (3 Compute Nodes required, each node must have the following specifications)** | | | | |
| Base | Rack mounted 2U servers | 1 |  |  |
| Chassis | SAS/SATA/NVMe Capable Backplane  16X 2.5 SAS/SATA + 8X 2.5 NVME without XGMI | 1 |  |  |
| Trusted Platform Module | Trusted Platform Module 2.0 V3 |  |  |  |
| Processor | AMD 7452 2.35GHz,32C/64T,128M,155W,3200 | 1 |  |  |
| Additional Processor | AMD 7452 2.35GHz,32C/64T,128M,155W,3200 | 1 |  |  |
| Memory | 64GB RDIMM, 3200MT/s, Dual Rank | 8 |  |  |
| Hard Drive | 960GB SSD SAS Read Intensive 12Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD, | 2 |  |  |
| Power Supply | Power Supply 800W RDNT D, Mixed Mode |  |  |  |
| Power Cords | C13 to C14, PDU Style, 10 AMP, 13 Feet (4m), Power Cord | 2 |  |  |
| PCIe Riser | Riser Config 4, Half Length, 6x8, 2x16 slots | ` |  |  |
| Motherboard | with 2 x 1Gb Onboard LOM | 1 |  |  |
| Embedded Systems Management (Multi) | iDRAC9, Express 15G |  |  |  |
| Network Adapters | Broadcom 57504 Quad Port 10/25GbE, SFP28, OCP NIC 3.0 | 1 |  |  |
| Optics and Cables for Network Adapters | Networking Cable, SFP28 to SFP28, 25GbE, Passive Copper Twinax Direct Attach Cable, 3 Meter | 4 |  |  |
| Rack Rails | ReadyRails Sliding Rails with Cable Management Arm | 1 |  |  |
| Warranty | Basic Next Business Day 36 Months, 36 Month(s) |  |  |  |
|  |  |  |  |  |
| **Storage (2 Storage Nodes required, each node must have the following specifications)** | | | | |
| Base | Rack mounted 2U servers | 1 |  |  |
| Chassis | SAS/SATA Backplane  2.5" Chassis with up to 16 Hard Drives (SAS/SATA), 2 CPU | 1 |  |  |
| Trusted Platform Module | Trusted Platform Module 2.0 V3 |  |  |  |
| Processor | Intel® Xeon® Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache, Turbo, HT (120W) DDR4-2666 | 1 |  |  |
| Additional Processor | Intel® Xeon® Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache, Turbo, HT (120W) DDR4-2666 | 1 |  |  |
| Memory | 64GB RDIMM, 3200MT/s, Dual Rank, 3200MT/s RDIMMs | 2 |  |  |
| Hard Drive | 480GB SSD SATA Read Intensive  6Gbps 512 2.5in Hot-plug AG Drive, 1  DWPD | 2 |  |  |
| Hard Drive | 3.84TB SSD SAS Read Intensive 12Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD | 12 |  |  |
| Power Supply | Dual, Hot-plug, Fully Redundant Power Supply (1+1), 1400W, Mixed Mode |  |  |  |
| Power Cords | Rack Power Cord 4M (C13/C14 12A) | 2 |  |  |
| PCIe Riser | Riser Config 0, Half Length, Low Profile, 5x16 + 1x4 slots | ` |  |  |
| Motherboard | Dual Port 1Gb Onboard LOM | 1 |  |  |
| Embedded Systems Management (Multi) | iDRAC9, Express 15G |  |  |  |
| Network Adapters | Broadcom 57414 Dual Port 10/25GbE SFP28, OCP NIC 3.0 | 2 |  |  |
| Optics and Cables for Network Adapters | Networking Cable, SFP28 to SFP28, 25GbE, Passive Copper Twinax Direct Attach Cable, 3 Meter | 4 |  |  |
| Rack Rails | ReadyRails Sliding Rails with Cable Management Arm | 1 |  |  |
| Warranty | Basic Next Business Day 36 Months, 36 Month(s) |  |  |  |
|  |  |  |  |  |
| **Control Node (3 Control Nodes required, each node must have the following specifications)** | | | | |
| Base | Rack mounted 1U server | 1 |  |  |
| Chassis | SAS/SATA Backplane  Chassis with up to 8x2.5" Drives | 1 |  |  |
| Trusted Platform Module | Trusted Platform Module 1.2 V2 |  |  |  |
| Processor | Intel® Xeon® Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache, Turbo, HT (120W) DDR4-2666 | 1 |  |  |
| Additional Processor | Intel® Xeon® Silver 4310 2.1G, 12C/24T, 10.4GT/s, 18M Cache, Turbo, HT (120W) DDR4-2666 | 1 |  |  |
| Memory | 64GB RDIMM, 3200MT/s, Dual Rank 3200MT/s RDIMMs | 2 |  |  |
| Hard Drive | 960GB SSD SAS ISE Read Intensive 12Gbps 512 2.5in Hot-plug AG Drive, 1 DWPD, | 2 |  |  |
| Power Supply | Dual, Hot-plug, Fully Redundant Power Supply (1+1), 800W, Mixed Mode |  |  |  |
| Power Cords | Rack Power Cord 4M (C13/C14 12A) | 2 |  |  |
| PCIe Riser | Riser Config 1, 1xOCP 3.0(x16)+ 2x16LP | ` |  |  |
| Motherboard | Dual Port 1Gb Onboard LOM | 1 |  |  |
| Embedded Systems Management (Multi) | iDRAC9, Express 15G |  |  |  |
| Network Adapter | Broadcom 57414 Dual Port 10/25GbE SFP28, OCP NIC 3.0 | 2 |  |  |
| Optics and Cables for Network Adapters | Networking Cable, SFP28 to SFP28, 25GbE, Passive Copper Twinax Direct Attach Cable, 3 Meter | 4 |  |  |
| Rack Rails | ReadyRails™ Sliding Rails With Cable Management Arm | 1 |  |  |
| Warranty | Basic Next Business Day 36 Months, 36 Month(s) |  |  |  |
|  |  |  |  |  |

1. **Financial Proposal**
   1. The contract terms are set out in on the UbuntuNet Alliance website and combined with the Bidder’s response to this tender, shall be “contractualized” in the schedules to the agreement to form the final agreement.
   2. Bidders must complete the pricing table below (Table 4) with ALL prices provided in US Dollars.
   3. Quoted prices should be valid for at least 60 days.

Table 4: Pricing Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Pricing element | Unit Cost | Total (units needed) | Comments | Taxes to be added? State what they are and the % rate. |
|  |  |  |  |  |
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1. https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014L0024 [↑](#footnote-ref-1)