

| Tellder No.            |  |
|------------------------|--|
| KDU/PRO/CAP/ 112 /2022 |  |
|                        |  |
|                        |  |
|                        |  |

General Sir John Kotelawala Defence University, KandawalaEstate, Ratmalana, Sri Lanka.

T: Phone: 2632028, 2622995 Fax: 2622504, 2623599 Web:www.kdu.lk

23/03/2022

### INVITATION TO BID AND GENERAL CONDITIONS OF TENDER

- 1. The Vice Chancellor of the General Sir John Kotelawala Defence University, as the Chairman, Department Procurement Committee Invites Bid/s from prospective Bidders for supply of <u>item/s listed in the schedule in Annex "A"</u>. The relevant specifications of the item/s are indicated in Annex "B".
- 2. <u>CLOSING DATE & TIME</u>. The tender will close at 1000 hrs. on 21/04 /2022. Any Bid submitted after the closing time of the tender will be rejected & unopened such bids will be returned to the bidder.
- 3. <u>VALIDITY OF BID.</u> date of closing of tender.

The bid submitted under this tender must be valid for a period of 120 days from the

- 4. BID BOND / GUARANTEE.
- (b) Submission of insufficient Bid Bond/Guarantee value or period will be considered as a "major deviation" and such offer will not be considered for further procurement action and will be rejected.
- 5. <u>YALUE ADDED TAX</u>. The Bidders who bid for locally delivered items must have the VAT registration. The VAT portion must be shown separately in the price schedule in Annex "A" and VAT registration number must be indicated. If the quoted item is exempted from VAT or Bidding Company is not liable for VAT, reference number and date of relevant Act number/Gazette notification/a certificate (as applicable) <u>issued for the current financial year</u> from the Commissioner General of Inland Revenue to that effect should be submitted along with the Bid.
- 6. BID SUBMISSION. The bidder must duly sign at the last page (before Annexes) of this document indicating the name of the signatory and the name of the company & place the company common seal to confirm the acceptance of tender conditions. The Bid/s that do not include authorized signature will be rejected. The Bid/s duly signed by the bidder enclosed and sealed in an appropriate cover addressed to the following address should be sent by registered post or could be deposited in the appropriate tender box placed at General Sir John Kotelawala Defence University. Kandawala Estate. Ratmalana (at the Main Entrance of General Sir John Kotelawala Defence University) on or before the time & date specified for the closing of tender. The tender reference number, date & time of closing tender should be indicated & underlined at the top left corner of the envelop.

 The Chairman,
Department Procurement Committee,
General Sir John Kotelawala Defence University,
Kandawala Estate, Ratmalana,
Sri Lanka.

- 7. The Bid/s must be submitted in the attached schedule of prices in Annex "A" as applicable. However, bidders could use similar formats prepared with their own letter heads with all the details mentioned therein and submit in three copies along with duly signed copy of a General Conditions of tender. The Bid/s must contain Technical Literature, Pamphlets, Drawings and Quality Standard Certificate etc necessary to determine characteristics of items offered and in case of Machinery/Vehicles & Equipment, servicing and workshop data/after sales service, back up facilities or any other facilities provided by the supplier.
- 8. <u>SUBMISSION OF SAMPLES/PAYMENT OF TESTING CHARGES</u>.

  When it is required to submit samples, <u>every offer</u> must be accompanied with pre marked samples. The marking of samples <u>indicating the Bidder & Offer number</u> must be done and the samples must be handed over to the officer at same place where tender box is placed <u>on or before the closing date & time of the Bid</u>. Samples submitted after closing time of the Bid will be rejected. The documents such as Air Way Bills etc, will not be accepted in place of samples. When the testing charges are required
- - (2) <u>Testing Charges</u>. A sum of Rs.....<u>per offer must be paid to the Bursar of KDU,</u> prior to the submission of bid and a copy of the receipt must be annexed to the bid. It is the responsibility of bidder to inform the Cashier of the Account Office to note the tender number on the receipt issued for such payments.
- 8. <u>BID OPENING</u>. All duly received bids <u>will be opened immediately after the scheduled closing time of Bids at the same venue</u>. Bidders or their accredited agents could be present at the time of opening of bids.

### 9. PRICES.

For locally delivered items (including locally manufactured items & foreign items imported by the bidders) price must be quoted in Sri Lankan Rupees, inclusive of all charges for delivery of items to General Sir John Kotelawala Defence University Ratmalana, Faculty of Allied Health Science (FAHS) Werahera and University Hospital Werahera or Southern Campus Sooriyawewa. Unit price, VAT and Total price should be clearly indicated in schedule in Annex "A". Other than VAT, all other type of taxes (eg: NBT, BTT, etc.) should not be indicated separately and should be included in unit price.

- 10. **RESTRICTED TENDERS.** Invitation to Bids are circulated a m o n g the registered suppliers with Ministry of Defence (MOD), only bids submitted by registered suppliers will be allowed for consideration. However, Chairman, Department Procurement Committee reserves the right to invite the bids from multiple combinations of Procurement Methods as stipulated in Chapter III of the Government Procurement Guideline, 2006 to ensure highest competitiveness.
- 11. **PERFORMANCE BOND/GUARANTEE.** A successful bidder shall f u r n i s h a Performance Bond/Guarantee in the form of "On Demand" & "Unconditional" Bank/Insurance Guarantee for a sum equivalent to 10% of the contract value for every contract that exceeds Rs. 2,000,000.00 or equivalent amount in foreign currency through a recognized Commercial Bank registered in Sri Lanka or through an Insurance Company authorized by the Insurance Board of Sri Lanka to issue such Performance Guarantee for this purpose, **within two weeks from the date of notification of award**. The proceeds of the Performance Bond/Guarantee shall be payable to the Vice Chancellor of the General Sir John Kotelawala Defence University as compensation for any loss resulting from the supplier's failure to complete his performance obligations under the contract. If the contracted supplier fails to deliver the items on time or fails to complete the works as per the agreed contract, **THE TOTAL VALUE OF THE PERFORMANCE BOND/GUARANTEE** will be forfeited. If only partial delivery is made during the agreed contract period, the corresponding value percentage of undelivered quantity from the Performance Bond/Guarantee will be forfeited.
- 12. SIGNING OF CONTRACT. The notification of award will be transmitted to the successful bidder by post, by fax or e-mail. This notification constitutes the formation of the contract. The successful bidder should submit his written acceptance for the award and performance bond / guarantee (For awards over Rs. 500,000.00 without VAT) within 14 days of receipt of such notification. Upon acceptance of the award and furnishing of the Performance Bond/Guarantee, the successful bidder will have to enter into a formal contract with the Vice Chancellor of the General Sir John Kotelawala Defence University by signing the Contract.
- 13. **DELIVERY.** Preference will be given for early delivery. In case of bulk supplies for locally manufactured items, the delivery of **total quantity must be completed within 120 days of signing of contract**, unless mutually agreed for extended delivery period with General Sir John Kotelawala Defence University. **The bidder/s must indicate the proposed delivery schedule in Annex "D"**. In the event of placing a purchase order with the successful bidder, the total quantity so ordered must be supplied as one consignment unless part deliveries are agreed upon in the contract. The deliveries not made as per agreed delivery schedule will be considered as bad performances by the suppliers and **no extended delivery period will be authorized**. Under extreme unavoidable conditions too, the Chairman, Department Procurement Committee (Vice Chancellor of the General Sir John Kotelawala Defence University) reserves the right to grant or refuse delivery period extensions only within the current financial year with or without liquidated claim for delayed deliveries and that decision will be final.
- 14. **LIOUIDATED DAMAGES.** In case of delivery period extensions requested by the successful bidder, a sum equivalent to 1% of the total value of the delayed supply per delay of one week or part thereof may be deducted from the payment due to the supplier from the General Sir John Kotelawala Defence University as liquidated damages up to the maximum limit of 12% of the total value of delayed supplies.
- 15. PAYMENT TERMS FOR LOCALLY DELIVERED ITEMS. Payment will be made after acceptance of items which should be subjected to a pre-acceptance inspection/testing by General Sir John Kotelawala Defence University authorities. The delivery made to the General Sir John Kotelawala Defence University should not be considered as quantities taken over by General Sir John Kotelawala Defence University until items are properly accepted after pre-acceptance inspection. Any item that does not conform to the specifications or already approved sample will be rejected & it is the responsibility of the supplier to remove them from General Sir John Kotelawala Defence University stores/premises within 07 working days of such intimation (either verbal or written) at his own cost and replace them with items conforming to specification within one month of such rejection. The bidder shall allow approximately 60-90 days' period of credit from the date of acceptance of items for Account Office, General Sir John Kotelawala Defence University to obtain liquid cash from General Treasury & release the payment.
- 16. <u>RIGHTS OF THE PROCUREMENT COMMITTEE</u>. The Department Procurement Committee reserve the right to accept or reject whole or part of this tender and their decision will be final. The successful bidders will be notified. Information with regard to rejected or unsuccessful bids will not be communicated.

Thanking You, Yours faithfully,

SA Kumarahayaka For Vice Chancellor

General Sir John Kotelawala Defence University

I/We agree to abide by the conditions of tender and undertake to supply the items as per delivery schedule mentioned in the contract, in the event of an order been placed with me/my firm/company as a result of this tender.

Signature

Name of Signatory

Name of the Company/Bidder

Date :- ..... Company seal



### (D)

### SCHEDULE OF PRICES FOR LOCALLY DELIVERED ITEMS

| S/N                                       | ITEMS   |   | DENO  | QTY                                     | PRICE<br>EACH<br>SLRS                   | TOTAL PRICE<br>SLRS |  |  |
|---|---|---|---|---|---|---------------------|--|--|
|   | PURCHASE OF FULLY EQUIPPED                                      |   |   |   |   |                     |  |  |
|   | INDUSTRIAL AUTOMATION TRAININ                                   | NG  |   |   |   |                     |  |  |
|   | STATION FOR AUTOMOBILE  |   |   |   |   |                     |  |  |
|   | LABORATORY  |   |   |   |   |                     |  |  |
| 01  | Fully equipped industrial automation training                   | g station   | No's  | 1                                       |   |                     |  |  |
|   | As per attached specification                                   |   |   |   |   |                     |  |  |
|   | TOTAL   |   |   |   |   |                     |  |  |
|   | DISCOUNT  |   | naka ki da                                  | hall string                             |   |                     |  |  |
|   | TOTAL(AFTER DISCOUNT)   |   |   |   |   |                     |  |  |
|   | VAT %   |   |   |   |   |                     |  |  |
| WHILE YES                                 | GRAND TOTAL   |   |   |   |   |                     |  |  |
| (A)                                       | OTHER DETAILS   |   |   |   |   |                     |  |  |
| (A)                                       | (i) DELIVERY PERIOD   |   |   |   |   |                     |  |  |
|   | (ii) MAKE & MODEL   | •   |   | •••••                                   | • |                     |  |  |
|   | (iii) VALIDITY PERIOD   |   |   |   | • | •••••               |  |  |
|   | (iv) WARRANTY PERIOD  |   |   |   |   |                     |  |  |
|   | (v) PAYMENT TERMS   | ·   | DEDIT                                       | •••••                                   | ••••••                                  | •••••               |  |  |
|   |   |   | REDIT                                       |   |   |                     |  |  |
|   | (vi) COUNTRY OF ORIGIN<br>(vii) DISCOUNT IF ANY                 |   |   |   |   |                     |  |  |
|   |   | ••  |   |   |   | ••••••              |  |  |
|   | (viii) ANY OTHER TAXES  |   | •••••                                       | •••••                                   | ••••••                                  |                     |  |  |
| (D)                                       | VAT DETAIL O  |   |   |   |   |                     |  |  |
| (B)                                       | VAT DETAILS   |   |   |   |   | NENT REGISTRATION   |  |  |
|   |   |   |   |   |   | N LETTER ISSUED BY  |  |  |
|   |   |   | DEPARTMENT OF INLAND REVENUE TO BE ATTACHED |   |   |                     |  |  |
| (C)                                       | PLACE OF DELIVERY   | - ITEMS TO BE DELIVERED TO THE "GENERAL SIR JOHN KOTELAWALA DEFENCE UNIVERSITY, |   |   |   |                     |  |  |
|   |   |   |   |   |   |                     |  |  |
|   |   |   |   |   |   | NA ALONG WITH THE   |  |  |
|   |   | COPY OF   | ORDEF                                       | RANDR                                   | ELEVANT                                 | INVOICE.            |  |  |
|   |   |   |   |   |   |                     |  |  |
|   |   |   |   |   |   |                     |  |  |
|   | Any queries / information with reg                              |   | SALES TO SERVICE                            |   |   |                     |  |  |
|   | from Officer Commanding Logist                                  |   |   |   |   |                     |  |  |
|   | Defence University through e-mail                               | ocls@kd   | u.ac.lk                                     | and by                                  | telephone                               | e number 0112622504 |  |  |
|   | during working hours.   |   |   |   |   |                     |  |  |
|   |   |   |   |   |   |                     |  |  |
|   | NOTE: UNIT PRICE AND TOTAL PRICE ARE TO BE INDICATED CLEARLY IN |   |   |   |   |                     |  |  |
|   | THE TENDER, IF NOT QUOTATION WILL BE REJECTED.                  |   |   |   |   |                     |  |  |
|   | SUPPLIER NAME   |   |   | • |   |                     |  |  |
|   | ADDRESS   |   |   |   |   |                     |  |  |
| ADDRESS                                   |   |   |   |   |   |                     |  |  |
|   |   | •••••   | •••••                                       |   | •••••                                   | Company Seal        |  |  |
|   | E MAIL ADRESS   | ••••••  | ••••••                                      | • | •••••                                   |                     |  |  |
|   |   |   |   |   |   |                     |  |  |
| (E) Bid Reference: KDU/PRO/CAP/ 112 /2022 |   |   |   |   |   |                     |  |  |
| (-)                                       |   | _ , _ 0   |   |   | Con France                              | DATE                |  |  |
|   |   |   |   |   |   | DAIL                |  |  |

# Fully equipped industrial automation training station

### SCADA for real-time process

Function of the system

option of extending the oxygen feeding system to a control circuit. The mechatronics training system should comprise: functions using an electrically adjustable compressed air diaphragm pump. Combined with the available oxygen sensor, there is also an flow measurement system with an adjustable pump for setting and monitoring the sludge return ratio. The oxygen feeding on the station settlement tank. Plastic granules are used as the soiled load and can be air-dried and re-used after utilization. The sludge return has a The station maps the physical functions of wastewater treatment after the sludge treatment and contains an aeration tank and a secondary

- . Main Components
- 3 l tank, including an overflow rim,
- ) 101 tank
- ventilation system
- capacitive proximity sensor
- ) float switch
- magnetic-inductive flow sensor
- ) centrifugal pump
- 2/2-way solenoid valve
- electric connection board
- aluminum profile plate
- 1x Tabletop power supply unit 1x Sedimentation granules
- m) 1x DC Wattmeter

Mr. PSH Pallemulla Lecturer (Probationary)

Ms. HDI Piyumini Lecturer (Probationary)

Mr. UVH Sameera
Temporary Demonstrator

- n) 1x Trolley with plate
- 1x Tool set
- p) 1x Pipe and tubing cutter
- Water supply tank/ground water
   Main components:
- a) Systainer with T-LOC system, 301
- ) Adapter for piping connectors) Submersible pump
- 1) Prefilter
- Float switch
- Water sieve
- ) Mobile roller system
- Additional oxygen measurement package
- a) Optional extension for the wastewater treatment station.b) Measuring cell for dissolved oxygen with integrated optoelectronics.
- c) Measuring principle: Oxygen-dependent luminescence.
- Technical data
- Water (10 15 l)
- Power supply: 24 V DC
- ) -5 digital inputs
- ) 5 digital outputs

Mr. PSH Pallemulla Lecturer (Probationary)

Ms. HDI Piyumini Lecturer (Probationary)

Mr. UVH Sameera
Temporary Demonstrator

- 4 analog inputs
- -2 analog outputs

00

Dimensions (H x W x D): 710 x 900 x 400 mm

### S Media:

- Technical documentation
- Workbook

### Controller - PLC:

6

- Work memory 75 kbyte or above
- Interface: Ethernet with 2-port switch preferred
- Load memory 4 Mbyte or more
- Ethernet cable included
- Programming software included with license
- 14 digital inputs (24 V DC) with switches/pushbuttons for signal simulation
- 10 digital outputs (24 V DC, 500 mA)
- 2 analog inputs (0 10 V)
- Modules with 4 mm safety plugs 1 analog output ( $\pm 10 \text{ V DC}$ , 0 - 20 mA)
- Programming languages: FBD, LAD, SCL
- Suitable for supplied mounting frame
- Lightweight injection-molded housing
- The units are supplied fully assembled
- Preferred CPU processing times o for bit operations, typ. 0.07 -0.09 μs; / instruction o for word operations, typ. 1.6-1.7 µs; / instruction o for floating point arithmetic, typ. 2.2-2.3 µs; / instruction
- PLC approvals: CE mark, UL, cULus FM, RCM (formerly C-TICK), KC, Marine
- Compatible with other items in the trainer and furniture

Lecturer (Probationary) Mr. PSH Pallemulla

.Ms. 劇Di Piyumini Lecturer (Probationary)

Mr. UVH Sameera

Temporary Demonstrator

### Human Machine Interface

- Minimum screen size 7 inch
- o. Technology TFT preferred
- . Supply voltage 24V
- l. Should be compatible with the software, PLC and other materials supplied
- Min memory available for user data 10 Mb
- Real time hardware clock
- Acoustic buzzer
- Min supported protocols
- TCP/IP

DHCP

- SNMP
- DCP
- LLDP
- Min degree of protection IP65 in front and IP 20 in rear
- Min Approvals
  i. CE mark
- i. cULus
- iii. RCM (formerly C-TICK)
- iv.. KC approval

### S. Computer

a) A Desktop computer with an i7 processor, 8 GB RAM, 1 TB HDD, DVD ROM, 23-inch monitor, keyboard, and mouse

### 9. Software and Simulation:

- Should be able to demonstrate the fundamentals of Supervisory Control and Data acquisition.
- Should be able to interconnect with the supplied trainer
- All binary and analog process data, for example the signal statuses of the sensors, process fittings, and pump, should be displayed graphically and evaluated directly

Mr. PSH Pallemulla Lecturer (Probationary)

Ms. HDI Piyumini Lecturer (Probationary)

Mr. UVH Sameera

Temporary Demonstrator

- Recording of sensor characteristics and determining a step response with functions such as selection of measuring channels, adjusting the test time, zooming
- flow, flow for pressure, pressure for voltage) The characteristics of a final control element should be investigated in various perspectives (voltage for
- A simulated process model should illustrate the sequence identically to the operation of the real hardware
- Should be able to experiment, configure and optimize the control processes with immediate effect in the
- The measured values and curve profiles are needed to be documented comprehensively
- Should be able to display a block diagram for all continuous controllers with current numerical values

## 10. Supervisory Control and Data Acquisition Software

- Compatible with Windows 10
- Min 6 licenses with 128 tags
- 11. Other requirements c. Compatible with other software and equipment in the training kit

### After sales service required. sedimentation granules and "Getting Started" technical documentation.

Should include control system with Water Management software, EasyPort, connecting cables, accessory set with

The station should be fully assembled, wired and tested

GENERAL TERMS

Manufacturer's authorization letter

- Warranty Minimum 01 year
- Country of Origin EU, UK, Japan, USA
- Product support
- Annual maintenance arrangement to be signed by successful bidder Comprehensive training for 5 personal
- All manuals should be in English (Workshop manual, spare part catalogue, Operations manual)
- Standard set of operational tools.

Lecturer (Probationary) Mr. PSH Pallemulla

Lecturer (Probationary) Ms. HD

Temporary Demonstrator Mr." UVH Sameera



### (92)

### SPECIMEN FORM OF BID SECURITY

|                           | SPECIMENTO  |  |  |  |  |  |  |  |
|---------------------------|---|--|--|--|--|--|--|--|
| bind themselves Wherea of | their successors and assigns jointly and the authority has invited the Tender a for the consideration of the Authority, in accordance with such invitation, t   | for the discovery depth of the discovery dept | ns to compete tenders in similar terms for the supply  |  |  |  |  |  |
| (a)                       | (a) That it shall remain in full force and effect until the earliest of   |  |  |  |  |  |  |  |
|                           | (i) (Date), being () days from (submission date), the date stipulated by the Authority for the submission of tenders, or any prolongation of such date above notified to the Authority by the Bidder and the Surety in writing. |  |  |  |  |  |  |  |
|                           | (ii) In the event of acceptance of the Tender by the Authority, the date upon which the Bidder provides a performance security to the Authority in accordance with the terms of the contract thereby made between them, or      |  |  |  |  |  |  |  |
| (b)<br>Bond uj            | (b) Subject to this Bond being in full force and effect, the Surety shall pay the full amount specified in this Bond upon receipt of first written demand form the Authority stating that.                                      |  |  |  |  |  |  |  |
|                           | (i) The Bidder has withdrawn his Tender during the validity of this Bond, or  |  |  |  |  |  |  |  |
|                           | (ii) The Bidder has failed to pro<br>terms of the tender within 14 days from  |  | ance security to the Authority in accordance with the nation of award of the Tender.                           |  |  |  |  |  |
| or thing concerni         | ration in the terms of the Tender, nor a<br>ing the Tender on the part of the Author<br>liability under this Bond.  | any forbearance<br>ority, nor any o  | of forgiveness in or in respect of neither any matter<br>bjection from the bidder shall in any way release the |  |  |  |  |  |
| the Authority sha         | efit of this Bond shall not be assignabled all return the same to the Bidder.  In the shall be governed by the laws of Sri  |  | rity and upon its ceasing to be in full force and effect   |  |  |  |  |  |
| I exec                    | euted as a deed on this ( ) day of  | f( )20(  | )  |  |  |  |  |  |
| For and                   | on behalf of the Bidder   |  | For and on behalf of the Surety  |  |  |  |  |  |
|                           |   |  |  |  |  |  |  |  |
| Signed I                  | by  |  | Signed by  |  |  |  |  |  |
| In the ca                 | apacity of  |  | In the capacity of   |  |  |  |  |  |
| and by                    |   |  | and by   |  |  |  |  |  |
| In the ca                 | apacity of  |  | In the capacity of   |  |  |  |  |  |

Seal (where applicable)

Seal (where applicable)

### DELIVERY SCHEDULE

| (IT IS MANDATORY TO FI | LL THE FOLLO | OWING SCHEDUL                           | E BY THE BIDD | ER) |
|------------------------|--------------|---|---------------|-----|
| TENDER NO:             |              |   |               |     |
| ITEM :                 |              |   |               |     |
|                        |              |   |               |     |
| QTY :                  | •••••••••••• | •••••                                   |               |     |
|                        |              |   |               |     |
| DURATION               |              | QTY                                     |               |     |
| EX STOCK QTY (WITHIN   | 01 WEEK)     |   |               |     |
| 01MONTH                |              |   |               |     |
| 02 MONTHS              |              |   |               |     |
| 03 MONTHS              |              |   |               |     |
| 04 MONTHS              |              |   |               |     |
| TOTAL                  |              |   |               |     |
|                        |              |   |               |     |
|                        |              |   |               |     |
| NAME OF THE BIDDER     | i            | •••                                     |               |     |
|                        |              |   |               |     |
| SIGNATURE OF BIDDER    | :            |   |               |     |
|                        |              |   |               |     |
| DATE                   | i            | • |               |     |
|                        |              |   |               |     |
|                        |              |   |               |     |
|                        |              |   |               |     |
|                        |              |   |               |     |
| OMPANY SEAL            | •            | •                                       |               |     |