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Contract

Supply of a Motion Control Platform

Diamond Light Source Ltd

F03: Contract award notice

Notice identifier: 2022/S 000-001011

Procurement identifier (OCID): ocids-h6vhtk-02c983

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Section I: Contracting authority

I.1) Name and addresses

Diamond Light Source Ltd

ADDRESS

TOWN

POSTCODE

Contact

Debbie Pryor

Email

procurement@diamond.ac.uk

Telephone

+44 1235567575

Country

United Kingdom

NUTS code

UKJ14 - Oxfordshire

Internet address(es)

Main address

<https://www.diamond.ac.uk>

I.4) Type of the contracting authority

Body governed by public law

I.5) Main activity

Other activity

Scientific Research

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

Supply of a Motion Control Platform

Reference number

DLSITT0426

II.1.2) Main CPV code

- 31000000 - Electrical machinery, apparatus, equipment and consumables; lighting

II.1.3) Type of contract

Supplies

II.1.4) Short description

DLS are looking for a replacement standard Motion Control Platform capable of driving a range of precision motors and providing high levels of accuracy, repeatability and response. The controller must be able to perform control of complex motion including multi axis coordinated movement. It is expected that the solution would be used to provide control for 1000 axes of motions on a range of projects. After an initial evaluation, DLS will purchase and evaluate units from those best suited and once satisfied with the performance select a preferred supplier. DLS will then purchase units to control several hundred axes a year from early 2022 for a minimum of 5 years.

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.3) Place of performance

NUTS codes

- UKJ14 - Oxfordshire

II.2.4) Description of the procurement

The scope of the contract is to design, manufacture, supply and deliver a high density,

highly flexible, ideally integrated Motion Controller and amplifier solution. It must be capable of providing control for a multitude of different types of Stepper, Servo, Voice Coil and Piezo motors and therefore interface to suitable encoders to facilitate closed loop control. The target solution drives a block of 8 motion axes from a single compact, rack-mounted unit, or many motors if distributed. For the purpose of this tender document, it can be assumed that 70% of the axes under control will be stepper motors, 10% servo motors and the remaining 20% external amplifier driven devices. Of these axes 80% can be considered to require either synchronisation with other axes on the same (highly desirable) or separate controller and or potentially operate with Kinematic routines. The motion controller should either be housed within the amplifier units or be a separate card to be located within a suitable modular style system attached by 1 or 2 cables to the drive amplifier unit. For an integrated amplifier and controller, the interface to our control and data acquisition system (EPICS) will be an Ethernet interface.

The system could take the form of a standard off the shelf offering or 'a special' in a suitable enclosure with back panel connectors. If this approach is taken it must conform to DLS Electrical and connector standards. For this reason, it is anticipated that solutions that comprise a standard system modified in some way to meet the DLS connector standard will be given an advantageous cost weighting to compensate for the extra cost of packaging and connectors.

The motion controller should be fully supported within the EPICS software framework.

II.2.5) Award criteria

Quality criterion - Name: Technical Quality / Weighting: 25

Quality criterion - Name: Experience & Capacity / Weighting: 20

Quality criterion - Name: Acceptance of Diamond Terms & Conditions / Weighting: 3

Quality criterion - Name: Currency / Weighting: 3

Quality criterion - Name: Delivery / Weighting: 4

Price - Weighting: 45

II.2.11) Information about options

Options: No

Section IV. Procedure

IV.1) Description

IV.1.1) Type of procedure

Open procedure

IV.1.8) Information about the Government Procurement Agreement (GPA)

The procurement is covered by the Government Procurement Agreement: Yes

IV.2) Administrative information

IV.2.1) Previous publication concerning this procedure

Notice number: [2021/S 000-028059](#)

Section V. Award of contract

A contract/lot is awarded: No

V.1) Information on non-award

The contract/lot is not awarded

Other reasons (discontinuation of procedure)

Section VI. Complementary information

VI.4) Procedures for review

VI.4.1) Review body

Diamond Light Source

Didcot

OX11 0ED

Country

United Kingdom