Tender

The Provision of Ocean-Bottom Seismographs

UNIVERSITY OF SOUTHAMPTON

F02: Contract notice
Notice identifier: 2021/S 000-029602
Procurement identifier (OCID): ocds-h6vhtk-02fb13
Published 29 November 2021, 4:54pm

Section I: Contracting authority

I.1) Name and addresses

UNIVERSITY OF SOUTHAMPTON

HIGHFIELD CAMPUS, UNIVERSITY ROAD

SOUTHAMPTON

SO171BJ

Contact

Jenna Scott

Email

procurement@soton.ac.uk

Telephone

+44 2380595000

Country

United Kingdom

NUTS code

UKJ32 - Southampton

Internet address(es)

Main address

www.southampton.ac.uk

Buyer's address

https://in-tendhost.co.uk/universityofsouthampton

I.3) Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at

https://in-tendhost.co.uk/universityofsouthampton/aspx/home

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

https://in-tendhost.co.uk/universityofsouthampton/aspx/home

Electronic communication requires the use of tools and devices that are not generally available. Unrestricted and full direct access to these tools and devices is possible, free of charge, at

https://in-tendhost.co.uk/universityofsouthampton

I.4) Type of the contracting authority

Body governed by public law

I.5) Main activity

Education

Section II: Object

II.1) Scope of the procurement

II.1.1) Title

The Provision of Ocean-Bottom Seismographs

Reference number

2021UoS-0412

II.1.2) Main CPV code

- 38000000 - Laboratory, optical and precision equipments (excl. glasses)

II.1.3) Type of contract

Supplies

II.1.4) Short description

The University of Southampton wishes to procure a small number (5-10 depending on cost) of broadband ocean-bottom seismographs to assess their interoperability with our existing instrument pool, with a view to expansion of these numbers in the mid-to-longer term. They will be used primarily for solid Earth imaging using natural sources of seismic energy (e.g. earthquakes, ocean waves) but will also be used in experiments that use manmade controlled seismic sources (e.g. airguns).

II.1.5) Estimated total value

Value excluding VAT: £395,000

II.1.6) Information about lots

This contract is divided into lots: No

II.2) Description

II.2.2) Additional CPV code(s)

- 38000000 - Laboratory, optical and precision equipments (excl. glasses)

II.2.3) Place of performance

NUTS codes

- UKJ - South East (England)

Main site or place of performance

The Equipment purchased from this tender exercise is to be delivered to:

National Oceanography Centre Southampton (NOCS)

European Way, Southampton SO14 3ZH

II.2.4) Description of the procurement

The Ocean-Bottom Instrumentation Facility (OBIF) has a successful track record of over 15 years of deploying a range of autonomous sensors on the seabed. OBIF is funded by the UK's Natural Environment Research Council (NERC) and operated jointly by the Universities of Southampton and Durham to support researchers in a range of environmental science disciplines. We carry out deployments in water depths ranging between 10's of m and 5500 m for periods from a few days to a year to measure parameters such as ground vibration, pressure, and electric and magnetic field strengths.

OBIF currently have a fleet of 55 autonomous seabed instruments, with a physical platform (flotation, pressure tubes, acoustic releases) modified from an original Scripps Institution of Oceanography design, although the current generation of loggers are an internal OBIF design. For measuring vibrations, we currently use high-frequency sensors. We have been awarded NERC capital funding to extend our capability by purchase of a number of market-established broadband ocean-bottom seismographs.

We wish to procure a small number (5-10 depending on cost) of broadband ocean-bottom seismographs to assess their interoperability with our existing instrument pool, with a view to expansion of these numbers in the mid-to-longer term. They will be used primarily for solid Earth imaging using natural sources of seismic energy (e.g. earthquakes, ocean waves) but will also be used in experiments that use manmade controlled seismic sources (e.g. airguns).

II.2.5) Award criteria

Quality criterion - Name: Mandatory Technical Requirements / Weighting: Pass / Fail

Quality criterion - Name: Desirable Technical Requirements / Weighting: 40

Quality criterion - Name: Exemplar Deployments / Weighting: 15

Quality criterion - Name: Quality of Data Samples / Weighting: 25

Cost criterion - Name: Number of Seismographs provided for the budget / Weighting: 20

II.2.6) Estimated value

Value excluding VAT: £395,000

II.2.7) Duration of the contract, framework agreement or dynamic purchasing system

Duration in months

60

This contract is subject to renewal

No

II.2.10) Information about variants

Variants will be accepted: No

II.2.11) Information about options

Options: No

II.2.14) Additional information

This procurement is not suitable for splitting into lots. The risk of dividing the requirement into Lots would render the execution of the contract excessively technically difficult, not cost effective and would undermine proper execution of the contract.

Section III. Legal, economic, financial and technical information

III.1) Conditions for participation

III.1.2) Economic and financial standing

List and brief description of selection criteria

To support the financial assessment, the University will obtain a Business Risk Report for all Tenderers and every organisation that is being relied on to meet this procurement, using an independent company called Creditsafe.

The University reserves the right to exclude a Tenderer or request provision of further assurances such as parent company/bank guarantee or performance bonds where a

Tenderer's Business Risk Score is: "Moderate Risk"; "High Risk"; "Very High Risk"; or "Not Rated", based on the rating provided by Creditsafe.

Where a Business Risk Score from our external system is not available, then an alternative method of assessing financial standing will be used. This method is detailed within the Invitation to Tender document set.

Minimum level(s) of standards possibly required

Tenderers are advised that a requirement of this procurement is to have in place, or commit to obtain prior to the commencement of the contract, the following minimum insurance levels:

Employers (Compulsory) Liability: £10 million GBP per occurrence.

Public Liability: £10 million GBP per occurrence.

Product Liability: £10 million GBP per occurrence and in aggregate

Professional Indemnity Insurance: £5 million GBP per occurrence.

III.1.3) Technical and professional ability

List and brief description of selection criteria

Tenderers attention is drawn to the MANDATORY requirements of the award criteria:

A. Instrument:

1) A modular system that enables flexible configuration to meet science goals by change of sensor, internal filtering and/or battery configurations.

2) A system capable of full recording operations on at least 4 channels at 100 Hz sampling for at least 12 months duration, without the need for additional flotation or battery tubes.

B. Platform:

1) Platform to be proven by multiple past successful deployments. Data examples (in miniseed form with appropriate meta-data including instrument response, station longitude, latitude, water depth, clock synchronization and any time corrections applied) should be provided as part of the tender submission, and be sufficient to enable evaluation of performance during quiescent periods and periods of seismic activity, together with periods of sensor releveling as applicable.

2) To have trawl-resistant features and a low profile to seafloor currents.

3) To have a depth rating for all deployed components of at least 6000 m.

4) For interoperability with the existing fleet equipped to enable recovery from seabed via an acoustic release system compatible with Edgetech (formally ORE Offshore) manufactured deck units using the BART command set.

5) For interoperability with the existing fleet, equipped with an acoustic release system with at least two burn wires that can be activated independently.

6) Equipped with quick/easy release fittings to accommodate Xeos LED alkaline light (XMF-11K), VHF radio (XMB-11K) and Argos (XMA-11k) beacons and a flag pole no larger in diameter than 1.5 cm. For avoidance of doubt, OBIF will supply the light and beacon units and the flag pole.

7) To include a lifting point certified to at least twice the maximum entire platform (including ballast) pre-deployment load. Certificates to be included with delivery.

C. Sensors:

1) To be able to record three orthogonal components of ground motion and single component of pressure as a minimum.

2) Ground motion sensor compatibility must include both seismometer and geophone, with a seismometer preferred for supply.

3) Pressure sensor compatibility should include differential pressure gauge and hydrophone, with a differential pressure gauge preferred for supply.

4) Supplied sensors must have a flat sensor response, for all components of ground motion and pressure, over a frequency band of at least 0.01 Hz to 100 Hz.

5) Supplied ground motion sensor must be fully operable on seafloor slopes up to at least 40 degrees. If achieved by self-levelling, the levelling schedule must be operator programmable.

6) Supplied ground motion sensor must be proven to be not prone to jamming by internal components (e.g. mass lock, gimbal brakes).

D. Datalogger:

1) Datalogger to have a range of user-programmable sample recording rates.

2) Datalogger recording capacity to be at least 128 GB.

3) Low drift rate clock timing module to be better than 10-7.

4) Capability for recording timestamps and drift rates against GPS clock/time standards (either 1 PPS or NMEA) before and after deployment.

5) Integrated workflow for downloading data from the datalogger and its conversion to a standard data format.

E. Data output and format:

1) Output data format to be miniseed.

2) Metadata to include timing, with an option to apply or not apply the time drift correction as part of download/format conversion.

F. Warranty and servicing

1) All electronic components to be covered by warranty for a period of at least 12 months.

2) Mechanical components to be covered by warranty for a period of at least 12 months, or until first customer deployment after acceptance.

3) Firmware and data processing updates to be included in the price for a period of 5 years.

4) Two services for each seismometer sensor (if supplied) at the manufacturer's base within a period of 5 years to be included in price. Customer will bear cost of return shipping, and any parts that are identified as being required due to proven customer mishandling.

G. Other:

1) Comprehensive manual(s) outlining instrument construction and deployment/recovery operations, datalogger programming, and data and metadata download.

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.2.2) Time limit for receipt of tenders or requests to participate

Date

10 January 2022

Local time

12:00pm

IV.2.4) Languages in which tenders or requests to participate may be submitted

English

IV.2.6) Minimum time frame during which the tenderer must maintain the tender

Duration in months: 6 (from the date stated for receipt of tender)

IV.2.7) Conditions for opening of tenders

Date

10 January 2022

Local time

12:01pm

Section VI. Complementary information

VI.1) Information about recurrence

This is a recurrent procurement: No

VI.2) Information about electronic workflows

Electronic ordering will be used

Electronic invoicing will be accepted

Electronic payment will be used

VI.3) Additional information

E-Tendering Portal: The University is utilising an electronic tendering tool, In-Tend (https://intendhost.co.uk/universityofsouthampton) to manage this procurement and to communicate with potential suppliers and/or tenderers (as appropriate).

All documentation in relation to this tender can be downloaded from In-Tend.

Potential suppliers/tenderers are advised that there will be no hard copy documents issued and all communications with the University, including the submission of Selection Stage and/or Invitation to Tender responses will be conducted via In-Tend.

Regular monitoring of the portal is the responsibility of the potential supplier/tenderer.

If you are not already registered as a supplier with the University of Southampton, you will need to register in In-Tend in order to access the procurement documentation.

Once you have logged in as a supplier: click on 'Tenders'; locate the relevant project; and click 'View Details'. Once you are in the project screen, you will be able to register your organisation against the project and access all documentation by clicking 'Express Interest'.

Potential suppliers/tenderers are advised that formal expressions of interest in the project must be by way of completion and return of the relevant documents via In-Tend.

Further instructions for the submission of responses are below:

To submit your return:

1. Log in

2. Click 'Tenders'

3. Locate the relevant project

4. View details

5. Click on the tab relating to the relevant project stage (e.g. 'Invitation to Tender')

6. Click on the 'Attach Documents' button and upload your return.

7. Check ALL your response documents are uploaded and displayed in the 'My Tender Return' panel. The system will only permit your organisation to make one return.

8. Click the red 'Submit Return' button.

Please note, to preserve the integrity of the procurement, all communications with the University must be made via the correspondence function within In-Tend.

Publication of Award Details: In accordance with Regulation 50, paragraph (2) of the Public Contracts Regulations 2015 and subject to Article 5 and Annex 5, Part D (13) of Directive 2014/24/EU of the European Parliament and of the Council (if applicable), the University intends to publish the value of any resulting contract at the award stage, and reserves the right to do so. By submitting a response, potential suppliers/tenderers are consenting to publication of this information unless otherwise agreed in advance with the University.

Costs and Expenses: Potential suppliers/tenderers are solely responsible for their costs and expenses incurred in connection with the preparation and submission of responses and participation in this and all future stages of this procurement. Under no circumstances will the University be liable for any costs or expenses borne by potential suppliers/tenderers or any of their supply chain, partners or advisers in this procurement process.

The University is not liable for any costs in the event of the cancellation of this procurement process.

VI.4) Procedures for review

VI.4.1) Review body

University of Southampton

Southampton

Country

United Kingdom