

INSTYTUT OCEANOLOGII

POLSKIEJ AKADEMII NAUK



IO/ZN/3/2015

Sopot, July 1, 2015

CONTRACT AWARDING NOTICE

delivery of system for the measurements of concentration and isotopic composition of light elements in gases dissolved in seawater

Name and address of the Contracting Authority

Institute of Oceanology Polish Academy of Science ul. Powstancow Warszawy 55 81-712 Sopot, Poland Fax (48 58) 551 21 30 Email: office@iopan.gda.pl

I. The legal basis

The legal basis for the procedure is art. 30a of the Act 30 April 2010 on the Principles of Financing Science (Journal of Laws of 2010 No. 96, item 615 as amended) and art. 4, paragraph 8a of the Act of 29 January 2004, the Public Procurement Law (Journal of Laws of 2013, item 907, as amended).

Description of the subject of contract

- The subject of the procedure is the delivery of system for the measurements of concentration and isotopic composition of light elements in gases dissolved in seawater for the Contracting Authority - the Institute of Oceanology, Polish Academy of Sciences in Sopot ul. Powstancow Warszawy 55, 81-712 Sopot.
- CPV code: 38434560-9 Chemistry analyser
- Description of requirements and technical specification are set in chapter III of Contract awarding notice
- The Contracting Authority hereby states that only the minimum requirements were set out in the detailed technical specification of individual elements. The Contractors may offer the devices with the same or better specification in their bids. Shall the description of the subject of contract contain any trademarks, patents or other proprietary or exclusive rights, or if the origin of the subject of contract or part thereof was determined it must be assumed that the Contracting Authority, due to the nature of the subject of contract, provided such description with an indication of the type of the subject of contract and allows bids equivalent in terms their visual appearance, functionality, functional and performance parameters not worse than those given in the description of the subject of contract.
- Subject of contract must be new, free from defects or damage, not used, free of third-party rights.
- The Contracting Authority requires the Contractor to deliver the subject of contract to the registered office of the Contracting Authority (ul. Powstancow Warszawy 55, 81-712 Sopot) within the declared bid price (net
- The Contractor provide installation of the system and training of the users in the registered office of the Contracting Authority within the declared bid price (net value).
- The offered equipment should have minimum 12 months warranty.
- The Contractor shall provide the Contracting Authority documentation and operating manual in Polish and/or in English.
- 10. The Contracting Authority allows the bids to be submitted and settled in the following currencies: PLN or EURO.
- 11. The price (net value) quoted in the bid shall include all costs associated with the execution of the contract, including cost of the object of the contract, cost of packaging and transport to the registered office of the Contracting Authority, cost of insurance during delivery to the place of destination, cost of installation of the system and training of the users and cost of warranty.

III. Description of requirements and technical specification

The system should include:

1. Carbon dioxide isotope analyzer

Precision (1s, 60 sec / 5 min): δ^{13} C: 0.2% / 0.1% δ^{18} O: 2% / 1% (300-1000 ppm) $[^{12}C^{16}O_2]$: 100 ppb / 50 ppb $[^{13}C^{16}O_2]$: 5 ppb / 3 ppb

[12C18OO]: 1 ppb / 0.5 ppb

[H₂O]: 100 ppm / 50 ppm

Measurement Range:

CO₂: 360 – 25000 ppm H₂O: 4000 – 25000 ppm

• Operational Range

 $CO_2: 0-50000 \text{ ppm}$

H₂O: 0 – 70000 ppm (noncondensing)

• Response time:

 δ^{13} C, δ^{18} O: 1 second

 $[^{12}C^{\dot{1}6}O_2],\,[^{13}C^{16}O_2],\,[^{12}C^{18}O^{16}O];\,1$ second

• Transient Performance (response to steps of 200 ppm CO₂):

Max transient δ^{13} C change: 1‰ Max transient δ^{18} O change: 1‰

• Max Drift at STP (peak-to-peak, 1 hr average over 24 hours):

 $\delta 13C: < 2\%$

Accuracy:

CO₂: uncertainty <1% of reading (without calibration);

• Sampling Conditions:

Sample Temperature: -20 – 50 °C Operating Temperature: 10 – 35 °C

Ambient Humidity: non-condensing (0-100% RH)

Outputs:

digital (RS232), Ethernet, USB

• Power requirements:

115/230 VAC, 50/60 Hz

up to 350 W

• Weight:

up to 50 kg

2. Unit for the extraction of dissolved gases from seawater based on hydrophobic micro-porous membrane.

- The unit should be compatible with stable isotopes analyzer (see point 1.)
- Sampling Conditions:

Sample liquid temperature: 0 − 40 °C

Sample liquid flow rate: 1 - 2 L/min (user adjustable)

Sweep gas flow rate: 0.15 - 1.0 sL/min

- All gas and liquid parameters should be recorded on internal data logger. The data logger should also be able to record analog signals from other instruments in a single data file
- Data logger signal inputs/outputs:

Analog inputs: 16x single-ended (8 differential) channels

- 4 single-ended channels reserved for Gas Analyzer outputs
- 7 single-ended channels dedicated for DGEU parameters
- 4 single-ended channels available for user external inputs

Analog outputs: 3 available for user

Digital I/O: 6 available for user

Connections:

Sweep gas inlet/outlet to gas analyzer: 1/4"

Water inlet/outlet: 3/8"

Power Requirements:

10-30 VDC, 45 watts

• Weight: up to 18 kg

3. Multiport inlet unit enabling clean and fast change of the sample source for stable isotopes measurements.

4. Refrigerated/Heating Circulator

Working temperature range: from -30°C to +150°C

Temperature stability: ±0.03°C

Setting /display resolution: 0.1°C

• Temperature Display: LED

Pump capacity flow rate: 15 l/min

- Pump capacity flow pressure: 0.35 bar
- Pump connections: M10x1
- Filling volume: 16 liters
- Ambient temperature: from 5 to 40°C
- Weight: up to 45 kg
- Fittings: 2 barbed fittings suitable for tubing 8 and 10 mm inner dia. (pump connections M10x1 female)
- Cooling of compressor: air
- Power requirement: 230V/50Hz/12A

5. Thermosalinograph equipped with:

- PVC (plastic) manifold and water jacket for shipboard installation
- 64 MB memory,
- 3 bulkhead connectors for data I/O, A/D inputs,
- AC interface junction box providing optically isolated RS-232 interface,
- NMEA 0183 input port for navigation data,
- DC power to sensors (10 meter data I/O cable, 3 meter computer cable, NMEA test cable, and AC power cord),
- software, and complete documentation
- additional digital oceanographic remote seawater intake thermometer
- Stainless steel/plastic pipe coupling mounting kit for digital oceanographic remote seawater intake thermometer
- Interface Cable for digital oceanographic remote seawater intake thermometer
- RS-232 and navigation interface box, AC powered, isolated power, opto-isolated RS-232C and NMEA 0183 compliant interfaces, and up to 2 amps at 12 VDC to power a NMEA navigation device. The NMEA interface should merge position data with CTD data. It should include AC power cord and necessary interface cables and mating connectors, manual and software CD.
- Thermosalinograph spares kit containing e.g. connectors, o-rings,
- Thermosalinograph top end cap blank (flow chamber seal when sensors removed)
- Anti-foul holder kit
- Data I/O cable, RMG-4FS to 4-pin MS3106A connector, 10 m

6. 2 workstations:

- Processor CPU: Minimum CPU Mark 4220 points as on http://cpubenchmark.net/high_end_cpus.html page.
- Number of CPU Processing Cores: 2
- CPU Clock Speed: 2.6 GHz
- Max. CPU Turbo Frequency: 3.2 GHz
- Max. CPU Power Consumption (TDP): 37 Watt
- Screen Diagonal: 39.6 cm
- Resolution of Main Display: 1,366 x 768 Pixel
- Display Types: LED Backlight Display, Widescreen Display
- Display Property: Non-Glare
- Picture Format: 16:9
- Pixel Density: 100.5 ppi
- Screen Brightness :200 cd/m²
- RAM : Minimum 8 GB
- RAM Type : DDR3
- Memory Clock Speed: Minimum 1,600 MHz
- RAM Total Slot : Minimum 2x SO-DIMM
- Maximum Memory Expansion : Minimum 16 GB
- Hard Drive Type: SATA Hard Disk Drive
- Hard Drive Capacity: Minimum 500 GB
- Graphics Card: Integrated, Minimum 720 points in PassMark benchmark as on http://www.videocardbenchmark.net/mid_range_gpus.html page
- Graphics Memory Type : DDR3
- Graphics Card Features: DirectX 11.1, Shader Model 5.0

- Operating Systems: Microsoft Windows 7 Proffessional, Microsoft Windows 8.1 Pro
- Connections: Minimum 1 x USB 2.0, Minimum 3 x USB 3.0, Headphone 3.5mm Jack, Microphone
 3.5mm Jack
- Video Outputs :HDMI, VGA D-Sub (HD-15)
- Networking: Bluetooth 4.0, LAN, Wi-Fi, Intel Wireless Display (WiDi)
- Bluetooth Version: Bluetooth 4.0
- LAN Standard: Gigabit Ethernet (10/100/1000 Mbit/s)
- Wireless LAN Standards: IEEE 802.11a, IEEE 802.11b, IEEE 802.11g, IEEE 802.11n
- Optical Disc Drives : DVD Writer
- Supported Media Formats: CD-R, CD-ROM, CD-RW, DVD-RAM, DVD-ROM, DVD±R, DVD±R
 Double Layer, DVD±RW, DVD±RW Double Layer
- Additional Features: Built-in Microphone, Webcam, Multi-Gesture / Multitouch Touchpad
- Card Reader: 3in1 Card Reader
- Supported Card Types : SD, SDHC, SDXC
- Camera Resolution: 1280 x 720 Pixel
- Keyboard Type: Chiclet keyboard, US International Layout
- Extra Keys: Windows key, Function key, Number Pad
- Number of Speaker: 2
- Speaker System : Stereo Speakers
- Security Features: Kensington Lock Support, Supervisor Password, Hard Drive Password, User Password, Trusted Platform Module (TPM 1.2)
- Battery: Lithium Ion
- Battery Capacity: Minimum 4400 mAh
- Battery Life: Minimum 6 h
- Number of Cells: 6
- Color: Black
- Depth: 25.2 cm +- 0.25 cm
- Height: 31 mm +- 1 mm
- Width: 37.8 cm +- 0.25 cm
- Weight: 2.4 kg +- 0.1 kg
- Manufacturer's Guarantee: Minimum 12 months

IV. Place and date of implementation of contract

- 1. Deadline of the implementation of the contract: no later than December 15, 2015
- 2. Place of execution of the contract: the registered office of the Contracting Authority (ul. Powstancow Warszawy 55, 81-712 Sopot).

V. Terms and procedure of payment:

- 1. The contract is funded from designated subsidy from the Ministry of Science and Higher Education "Wyposażenie Laboratorium Badania Substancji Zakwaszających Wodę Morską (LaBSZWoM)".
- 2. The Parties agreed that the payment for the delivered object of the agreement will take place on the basis of the invoice delivered to the Institute of Oceanology, Polish Academy of Sciences in Sopot, following the signing the acceptance protocol by the Contracting Authority without reservations. The Contractor shall put the name of the delivered object of the agreement in accordance with the Contract awarding notice on the invoice.
- 3. Payment will be transferred from the account of the Contracting Authority to the Contractor's account within 30 days from the date of acceptance of the object of the agreement without reservations and after receipt of the invoice properly issued by the Contractor.
- 4. The cost of VAT will be settled and paid by the Contracting Authority, provided that the Contractor is an entity with its registered office outside the territory of the Republic of Poland and if it is required pursuant to the relevant tax provisions. In such a case the Contractor shall quote only the net value. In order to evaluate such an bid offer, the Contracting Authority shall increase the bid price by adding the tax on goods and services (VAT).

VI. Criteria of evaluation

Price – 100%

VII. Place and date and form of submission of bids, information regarding the procedure

- 1. The Bid should be submitted not later than on July 8, 2015, 10:00 am:
 - 1) in person (by post, courier) to the registered office of the Contracting Authority room 107,
 - 2) by fax: (48 58) 551 21 30
 - 3) by email mmasnicka@iopan.gda.pl
 - entitled "The Bid for the delivery of system for the measurements of concentration and isotopic composition IO/ZN/3/2015".
- 2. The Contractor shall prepared offer accordingly to the Appendix no 1 to the notice <u>Bid form</u> and enclose filled Appendix no. 2 to the notice <u>Summary of requirements and technical specification</u>.
- 3. The Contractor should also submit with the bid offer the Technical Specifications of offered devices (catalogs, brochures, catalog cards, etc.) confirming that the offered devices meet the requirements described in Appendix no 2 to the notice.
- 4. The Contracting Authority allows submission of bids and other documents in Polish or English.
- 5. The bid must be complete and must include all the elements and take into account all the conditions listed in Chapter II and III of the notice. The bids which would not include even one element shall be rejected as the bid which failed to comply with the requirements set in the notice.
- 6. The Contracting Authority does not allow partial bids.
- 7. In the case of bids submitted in currencies other than PLN, as well as in case of the necessity to compare the bids in various currencies, the Contracting Authority shall convert the offer price into PLN at the average exchange rate of the currency announced by the National Bank of Poland as of the day of submitting of the bids (July 8, 2015).
- 8. In the case of offer, the selection of which would result in tax obligation in accordance with the provisions concerning the tax on goods and services in relation to intra-Community acquisition of goods, in order to evaluate such an offer, the Contracting Authority shall increase the bid price by adding the tax on goods and services. In such a case the Contractor shall quote only the net value in the price offer form.
- 9. If the bid was submitted by the Contractor with its registered office outside the EU, customs duties and VAT will be settled and paid by the Contracting Authority. In such a case the Contractor shall quote only the net value in the price offer form and the Contracting Authority shall, increase the bid price by adding the tax on goods and services in order to evaluate such an offer.
- 10. The offers submitted after the deadline set in point 1 will not be taken into consideration.
- 11. The Contractor shall bear all costs associated with the preparation of the bid.
- 12. Promptly after the selection of the best offer the Contracting Authority shall inform the Contractors who submitted offer about of the results of this procedure. The Contracting Authority shall also place the Information about of the results of this procedure on its website.
- 13. The Contracting Authority reserves the right to cancel the procedure without the selection of the best offer.
- 14. The Contracting Authority may modify the content of the Contract awarding notice any time prior to the deadline for submitting bids. Any modification to the Specification shall be promptly placed on the website where the Contract awarding notice was provided. Each modification of the Specification becomes its integral part and its binding for the Contractor.
- 15. The bid validity period is 30 days, which begins with the deadline for submission of bids.
- 16. The Contracting Authority shall sing the Contract with the Contractor, whose offer was selected as the best offer, according to the agreement draft set out in Appendix no 3.
- 17. Before signing the Contract The Contracting Authority may asked the Contractor to submit the relevant abstract from the register or other documents accordingly to which the person signing the Contract is authorized to act in the Contractor's name.
- 18. After signing the Contract The Contracting Authority will promptly place on its BIP site information regarding the contract awarding procedure giving the name of the entity with whom the Contracting Authority has signed the contract or information about not awarding the contract.

VIII. List of documents, that shall be submitted in the procedure:

- 1. Bid form Appendix no. 1 to the notice,
- 2. Summary of requirements and technical specification Appendix no. 2 to the notice,
- 3. **Technical Specifications** of offered devices (catalogs, brochures, catalog cards, etc.) confirming that the offered devices meet the requirements described in Appendix no 2 to the notice.

Appendices:

- 1. Bid form Appendix no. 1
- 2. Summary of requirements and technical specification Appendix no. 2
- 3. Agreement draft Appendix no. 3
- 4. Benchmarks Appendix no 4.

NOTICE: The English version of the Contract Awarding Notice is only for informational use. In case of discrepancy between the Polish and the English version of the Contract Awarding Notice, the Polish version shall prevail.

NACZELNY INZYNIEF

mgr/inż. Kazimierz Groz