

Denmark-Kgs. Lyngby: Mass spectrometer
OJ S 133/2021 13/07/2021
Contract award notice
Supplies

Legal Basis:

Directive 2014/24/EU

Section I: Contracting authority

I.1. Name and addresses

Official name: Danmarks Tekniske Universitet — DTU

National registration number: 30060946

Postal address: Anker Engelunds Vej 1

Town: Kgs. Lyngby

NUTS code: DK01 Hovedstaden

Postal code: 2800

Country: Denmark

Contact person: Christian Torrendrup

E-mail: cvto@dtu.dk

Telephone: +45 23100296

Internet address(es):

Main address: <http://www.dtu.dk>

Address of the buyer profile: <https://eu.eu-supply.com/ctm/Company/CompanyInformation/Index/165863>

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**

Acquisition of Orbitrap Exploris with Vanquish Flex System

Reference number: 6060

II.1.2. Main CPV code

38433100 Mass spectrometer

II.1.3. Type of contract

Supplies

II.1.4. Short description

The National Food Institute is planning to buy a new liquid chromatography–mass spectrometry (LC-MS) instrument. The instrument will be used for target quantitative and non-target screening of small organic compounds in different food and environmental matrices (meat, fish, sludge, food contact materials, etc.). Currently the laboratory has Triple

Quadrupole and Time of Flight LC-MS technologies. It is important to establish new technology (Orbitrap) to enhance the quality of the education and research platform.

II.1.6. Information about lots

This contract is divided into lots: no

II.1.7. Total value of the procurement

Value excluding VAT: 3 063 074,41 DKK

II.2. Description

II.2.2. Additional CPV code(s)

38433100 Mass spectrometer

II.2.3. Place of performance

NUTS code: DK01 Hovedstaden

Main site or place of performance: Kgs. Lyngby (DTU Campus).

II.2.4. Description of the procurement

There are increasing needs for non-target screening of unknown organic compounds in food and environmental matrices while it is also crucial to perform quantitative analysis at the same time. These compounds are often present at trace levels. Therefore, an instrument used for these analysis must be able to provide high sensitivity and high mass accuracy in order to identify and quantify chemicals at very low concentrations with high level of confidence. The ability to run a large number of samples while maintaining the quality of the analysis is also important.

Currently the laboratory has Triple Quadrupole and Time of Flight (QTOF) LC-MS technologies. It is important to establish new technology (Orbitrap) to enhance the quality and diversity of the education and research platform.

II.2.5. Award criteria

Price

II.2.11. Information about options

Options: yes

Description of options:

Various options are included, primarily concerning DTU possibility of purchasing extended warranties. Total value of options is approximately DKK 360 000.

II.2.13. Information about European Union funds

The procurement is related to a project and/or programme financed by European Union funds:
no

II.2.14. Additional information

Section IV: Procedure

IV.1. Description

IV.1.1. Type of procedure

Award of a contract without prior publication of a call for competition in the Official Journal of the European Union in the cases listed below

- The works, supplies or services can be provided only by a particular economic operator for the following reason:
 - absence of competition for technical reasons

Explanation:

There is a growing need to examine Per- and Polyfluoroalkyl Substances (PFAS) among other organic compounds in foods and environmental matrices. These classes of chemicals contain thousands of analytes with very similar chemical structure. However only a fraction of these analytes have been structurally identified by researchers. The same situation exists for other classes of chemicals such as pesticides and natural toxins. Recently, complete unknown screening is also very important for providing insights into the chemical complexity of a certain samples. In all of these applications, there is a need for very high resolution MS to ensure a significant identification of these compounds and also their metabolites/degradation products. And at the same time have the highest possible mass accuracy to discriminate interferences from analytes.

Since the analytes of our interest are often present at trace levels, the LC-MS instrument must provide both very high mass accuracy and sensitivity. The Orbitrap Exploris (Thermo Scientific) is equipped with Orbitrap technology that has a resolution capability of up to 480 000 for all scan modes and with both negative and positive ionisation. This is unmatched for a QTOF system (typical MS resolution of a QTOF system is around 60 000). The instrument also provides sub ppm (<1 ppm) mass accuracy which can be maintained for a long time. Additionally, the sensitivity of an Orbitrap is generally higher than that of a QTOF. There is also a trade-off between choosing high sensitivity or high mass accuracy in a QTOF system. The Orbitrap is the only technology that can provide super high mass resolution even at super low concentration.

The laboratory is either responsible or take part in several courses and special courses at Bachelor, Master, and PhD levels on mass spectrometry. Currently the laboratory has Triple Quadrupole and QTOF LC-MS technologies. To support the educational part, It is very important to establish new technology (Orbitrap) to expose students and course takers to a comprehensive range of modern mass spectrometry technologies.

The laboratory also participates in international ring trials of many different analytical methods where the Orbitrap technology are used. For the best direct comparison of method performance in these ring trials, there is a need to establish Orbitrap technology in our laboratory.

Thus, only the technical characteristics of a high resolution instrument based on Orbitrap technology can satisfy our need, which is patented by Thermo EP 1371081, EP 2442351, EP 1900002.

IV.1.3. Information about a framework agreement or a dynamic purchasing system

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 in the OJ S: [2021/S 109-287068](#)

IV.2.8. Information about termination of dynamic purchasing system

IV.2.9. Information about termination of call for competition in the form of a prior information notice

Section V: Award of contract

Contract No: 1

Title:

Acquisition of Orbitrap Exploris with Vanquish Flex System

A contract/lot is awarded: yes

V.2. Award of contract

V.2.1. Date of conclusion of the contract

24/06/2021

V.2.2. Information about tenders

Number of tenders received: 1

The contract has been awarded to a group of economic operators: no

V.2.3. Name and address of the contractor

Official name: Thermo Electron A/S

National registration number: 28314388

Postal address: Stamholmen 193

Town: Hvidovre

NUTS code: DK01 Hovedstaden

Postal code: 2650

Country: Denmark

The contractor is an SME: no

V.2.4. Information on value of the contract/lot

Total value of the contract/lot: 3 063 074,41 DKK

V.2.5. Information about subcontracting

Section VI: Complementary information

VI.3. Additional information

VI.4. Procedures for review

VI.4.1. Review body

Official name: Klagenævnet for Udbud

Postal address: Nævnenes hus, Toldboden 2

Town: Viborg

Postal code: 8800

Country: Denmark

E-mail: klfu@erst.dk

Telephone: +45 35291000

Internet address: <http://www.klfu.dk>

VI.4.3. Review procedure

Precise information on deadline(s) for review procedures:

Complaint that the contracting authority, contrary to the Public Procurement Act, has concluded a contract without prior publication of a contract notice in the European Union

Official Journal must be submitted no later than 30 calendar days from the date after a contract award notice has been published by the contracting authority in the European Union Official Journal and that contract award notice includes the grounds for the decision to award the contract directly, cf. lov om Klagenævnet for Udbud (Complaints Board for Tenders) § 7, section 3.

VI.4.4. Service from which information about the review procedure may be obtained

Official name: Konkurrence- og Forbrugerstyrelsen

Postal address: Carl Jacobsens Vej 35

Town: Valby

Postal code: 2500

Country: Denmark

E-mail: kfst@kfst.dk

Telephone: +45 41715000

Internet address: <http://www.kfst.dk>

VI.5. Date of dispatch of this notice

08/07/2021