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Award

## **Step-change improvements in sensitivity and scan speed**

NATIONAL NUCLEAR LABORATORY LIMITED

F15: Voluntary ex ante transparency notice

Notice identifier: 2024/S 000-027281

Procurement identifier (OCID): ocds-h6vhtk-0495a6

Published 27 August 2024, 1:41pm

### **Section I: Contracting authority/entity**

#### **I.1) Name and addresses**

NATIONAL NUCLEAR LABORATORY LIMITED

5th Floor Chadwick House, Birchwood Park

Warrington

WA3 6AE

#### **Email**

[nnl.procurement@uknnl.com](mailto:nnl.procurement@uknnl.com)

#### **Country**

United Kingdom

#### **Region code**

UKD61 - Warrington

#### **Companies House**

3857752

**Internet address(es)**

Main address

<https://www.nnl.co.uk/>

**I.4) Type of the contracting authority**

Body governed by public law

**I.5) Main activity**

Other activity

Nuclear

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**Section II: Object**

**II.1) Scope of the procurement**

**II.1.1) Title**

Step-change improvements in sensitivity and scan speed

Reference number

GC\_156\_7

**II.1.2) Main CPV code**

- 73100000 - Research and experimental development services

**II.1.3) Type of contract**

Services

**II.1.4) Short description**

National Nuclear Laboratory ("NNL") intends to award a contract to Fraunhofer UK Research Limited who will further develop the Concept for Hydromap III - Step-change improvements in sensitivity and scan speed as part of the Gamechangers Innovation Programme.

### **II.1.6) Information about lots**

This contract is divided into lots: No

### **II.1.7) Total value of the procurement (excluding VAT)**

Value excluding VAT: £432,836

## **II.2) Description**

### **II.2.3) Place of performance**

NUTS codes

- UK - United Kingdom

### **II.2.4) Description of the procurement**

The aim of this proof of concept project is to exploit a unique property of Hydrogen, in combination with the recent emergence of high performance single-photon detectors, to realise a device that will be able to detect this elusive molecule with unprecedented concentration and spatial accuracy over extended stand-off ranges.

### **II.2.11) Information about options**

Options: Yes

Description of options

Should additional funding become available to further develop this scope of work then the potential to extend is available.

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## **Section IV. Procedure**

### **IV.1) Description**

#### **IV.1.1) Type of procedure**

Negotiated without a prior call for competition

- The works, supplies or services can be provided only by a particular economic operator for the following reason:
  - protection of exclusive rights, including intellectual property rights

## Explanation:

National Nuclear Laboratory ("NNL") intends to award a contract to Sensor Driven who will further develop the concept for a Step-change improvements in sensitivity and scan speed as part of the Gamechangers Innovation Programme. Fraunhofer UK Research Limited has been developing the Hydrogmap III and were selected through a response to a Gamechangers Challenge Statement which sought applications for feasibility funding.

The aim of this proof-of-concept project is to exploit a unique property of Hydrogen, in combination with the recent emergence of high performance single-photon detectors, to realise a device that will be able to detect this elusive molecule with unprecedented concentration and spatial accuracy over extended stand-off ranges.

Following all supplier applications for feasibility funding for the above project, Fraunhofer UK Research Limited was selected as a successful supplier by the funders (Sellafield Ltd). An initial £5,000.00 of feasibility funding was provided, which supported Fraunhofer UK Research Limited to:

- Create a Business Case
- Generate of a Project Plan
- Identify milestones and funding requirements

The output of this feasibility study was then further evaluated by Sellafield Ltd and Fraunhofer UK Research Limited have been selected for additional funding for the Proof-of-Concept phase of this project, which will enable them to further develop this concept and technology further. This additional funding to support technology development is due to be awarded following the expiry of this VEAT notice.

Gamechangers is an innovation programme which finds solutions for complex nuclear industry challenges and allows the supplier to retain ownership of the Intellectual Property throughout the advancement of technology readiness level. They accept applications and work with all sizes and across all sectors to identify and develop the most promising of technology. Suppliers who have an idea which might be of interest, please follow the below link to the Gamechangers Technology challenge website for further information or to explore Challenges that may be of interest.

<https://www.gamechangers.technology/>

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

The procurement is covered by the Government Procurement Agreement: Yes

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## **Section V. Award of contract/concession**

### **Contract No**

GC\_156\_7

A contract/lot is awarded: Yes

### **V.2) Award of contract/concession**

#### **V.2.1) Date of conclusion of the contract**

16 August 2024

#### **V.2.2) Information about tenders**

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

#### **V.2.3) Name and address of the contractor/concessionaire**

Fraunhofer UK Research LTD

Glasgow

Country

United Kingdom

NUTS code

- UKM82 - Glasgow City

Companies House

SC419797

The contractor/concessionaire is an SME

Yes

#### **V.2.4) Information on value of contract/lot/concession (excluding VAT)**

Total value of the contract/lot/concession: £432,836

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## **Section VI. Complementary information**

### **VI.4) Procedures for review**

#### **VI.4.1) Review body**

The Royal Courts of Justice

The Strand

London

WC2A 2LL

Country

United Kingdom