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Tender

## **Procurement of a 350-1000 nm Tunable Pulsed Laser Source**

National Physical Laboratory

F02: Contract notice

Notice identifier: 2023/S 000-034239

Procurement identifier (OCID): ocids-h6vhtk-041b35

Published 20 November 2023, 12:00pm

### **Section I: Contracting authority**

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

National Physical Laboratory

Hampton Road

Teddington

TW11 0LW

#### **Contact**

Nina Heath

#### **Email**

[nina.heath@npl.co.uk](mailto:nina.heath@npl.co.uk)

#### **Country**

United Kingdom

#### **Region code**

UK - United Kingdom

**Internet address(es)**

Main address

<http://www.npl.co.uk>

**I.3) Communication**

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

<https://lupc.bravosolution.co.uk/>

Additional information can be obtained from the above-mentioned address

Tenders or requests to participate must be submitted electronically via

<https://lupc.bravosolution.co.uk/>

Tenders or requests to participate must be submitted to the above-mentioned address

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

Body governed by public law

**I.5) Main activity**

Other activity

Research

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## **Section II: Object**

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

#### **II.1.1) Title**

Procurement of a 350-1000 nm Tunable Pulsed Laser Source

#### **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 National Physical Laboratory requirement is for the supply of a laser source continuously tunable over the 350-1000 nm wavelength range. The source is to be used to calibrate single-photon detectors (SPDs) in NPL's new traceable calibration facility.

The source is required to be pulsed at a variable repetition rate.

The pulse jitter must be short enough to allow timing jitter measurements of SPDs.

The pulse width must be short enough to enable measurement of the detection profiles of gated detectors.

The pulse-to-pulse energy variability must be low enough so that the intensity of individual pulses do not need to be measured, and the mean value represents a very good approximation to the energy of any individual pulse.

The technologies likely to fulfil these requirements are Optical Parametric Oscillators (OPOs) with a Second Harmonic Generator (SHG) module and a stable pump laser to allow a low pulse-to-pulse amplitude uncertainty, or an Optical Parametric Amplifier (OPA) with similar SHG and stable pump laser requirement.

The 350-1000 nm wavelength tuning range is required to be achieved without change of optics or re-alignment. A pulse repetition rate between 1 MHz and 100 kHz is required (10 MHz-100 kHz is desirable). The operational temperature range is at least from 15 C to 30 C.

#### **II.1.5) Estimated total value**

Value excluding VAT: £270,000

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

This contract is divided into lots: No

### **II.2) Description**

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

NUTS codes

- UK - United Kingdom

Main site or place of performance

Teddington, UK

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

The National Physical Laboratory requirement is for the supply of a laser source continuously tunable over the 350-1000 nm wavelength range. The source is to be used to calibrate single-photon detectors (SPDs) in NPL's new traceable calibration facility.

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#### **II.2.5) Award criteria**

Price is not the only award criterion and all criteria are stated only in the procurement documents

#### **II.2.6) Estimated value**

Value excluding VAT: £270,000

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

End date

30 August 2024

This contract is subject to renewal

No

#### **II.2.10) Information about variants**

Variants will be accepted: Yes

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

Options: No

#### **II.2.13) Information about European Union Funds**

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

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## **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

5 January 2024

Local time

5:00pm

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

English

#### **IV.2.7) Conditions for opening of tenders**

Date

8 January 2024

Local time

9:00am

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## **Section VI. Complementary information**

### **VI.1) Information about recurrence**

This is a recurrent procurement: No

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

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

NPL Management

Teddington

Country

United Kingdom