

357513-2026 - Competition

Germany – Lasers – Photocathode Laser System

OJ S 99/2026 26/05/2026

Contract or concession notice – standard regime

Supplies

1. Buyer

1.1. Buyer

Official name: Helmholtz-Zentrum Dresden-Rossendorf e.V.

Email: dm-vergabe@hzdr.de

Legal type of the buyer: Public undertaking, controlled by a central government authority

Activity of the contracting authority: Education

2. Procedure

2.1. Procedure

Title: Photocathode Laser System

Description: Delivery, installation and commissioning of a Photocathode Laser System

Procedure identifier: 8ad3f151-58e7-4a71-ac17-6ff2a9069463

Internal identifier: EUOV2607

Type of procedure: Open

The procedure is accelerated: no

2.1.1. Purpose

Main nature of the contract: Supplies

Main classification (cpv): 38636100 Lasers

2.1.2. Place of performance

Postal address: Bautzner Landstraße 400

Town: Dresden

Postcode: 01328

Country subdivision (NUTS): Dresden, Kreisfreie Stadt (DED21)

Country: Germany

2.1.4. General information

Legal basis:

Directive 2014/24/EU

vgl. -

2.1.6. Grounds for exclusion

Sources of grounds for exclusion: Notice, Procurement Document

Breaching of obligations set under purely national exclusion grounds: The statutory exclusion requirements pursuant to Sections 123 to 126 of the German Act against Restraint of Trade (GWB) and the 5th EU Sanctions Package (RUS sanctions) apply. To this end, the self-declarations 'No grounds for exclusion' and 'RUS sanctions' attached to the tender documents must be completed and submitted as part of the tender.

5. Lot

5.1. Lot: LOT-0000

Title: Photocathode Laser System

Description: Helmholtz-Zentrum Dresden-Rossendorf (HZDR) has been working on the development of a superconducting electron source (SRF gun) for about 20 years. An integral part of this electron source is a photocathode laser which, in combination with a photocathode, uses the external photoelectric effect to generate electron pulses. These pulses are then accelerated by the electric field of the superconducting RF resonator. The required laser wavelength for this purpose is about 260 nm, while the aimed pulse energy at this wavelength is 5 µJ. Detailed requirements in the table below (2. Performance quote) are specified separately for the fundamental wavelength in infrared (IR) and the 4th harmonic in ultraviolet (UV). Pulse repetition rate shall be flexible and reach 2 MHz. The average power in UV has to reach at least 1 W. Laser pulse duration is a key optimization parameter that needs to be variable in the range of 0.3-10 ps FWHM. Moreover, the temporal (longitudinal) profile of the laser pulse overall is important for properties of the generated electron pulse and thus also needs to be adjustable. For this, a spatial light modulator for modifying the spectrum needs to be integrated in the offered system. It is desirable that the manufacturer finds settings of the spectral shaper that result in a flat-top temporal shape of the UV pulse. Given that the temporal shape of a chirped pulse is critical in the planned application, spectral smoothness, stability and absence of long wings or shoulders are of high importance. Spectrum distortions caused by nonlinear effects shall be insignificant even at the maximum required pulse energy. Ability to synchronize the oscillators' repetition rate to a radio-frequency (RF) reference signal is necessary. Achievable integrated time jitter in the range between 10 Hz and 1 MHz of the laser with respect to the reference shall not exceed 100 fs. However, synchronization electronics are not part of the current tender and will be obtained from another source. The oscillator needs to be prepared for repetition rate locking, i.e. contain a short-range and a long-range actuators for fine adjustment of the cavity length. Another aspect of synchronization is the ability to control the repetition rate and the emission time of the laser by an external trigger signal. This ability needs to be available. Reliability and permanent availability (24/7) are of particular importance. The system will be located in an optical laboratory with $\pm 1^\circ\text{C}$ temperature stability. Beside the fulfilment of the criteria described in annex 01A, the scope of deliveries and services includes, that means are to be offered in the quotation: • Factory Acceptance Test (FAT), with proof of fulfilment of the performance requirements • Delivery according to DDP (Incoterms 2010) to the place of usage • Installation und commissioning including On-Site Acceptance Test (OSAT), with proof of fulfilment of the performance requirements • 12 months warranty from OSAT • CE marking • complete manual in English • suitable "water-to-water chiller"

Internal identifier: LOT-0000

5.1.1. Purpose

Main nature of the contract: Supplies

Main classification (cpv): 38636100 Lasers

5.1.3. Estimated duration

Start date: 14/08/2026

Duration end date: 31/01/2027

5.1.6. General information

Reserved participation:

Participation is not reserved.

The names and professional qualifications of the staff assigned to perform the contract must be given: Not required

Procurement Project not financed with EU Funds.

The procurement is covered by the Government Procurement Agreement (GPA): yes

This procurement is also suitable for small and medium-sized enterprises (SMEs): no

5.1.7. Strategic procurement

Aim of strategic procurement: No strategic procurement

5.1.9. Selection criteria

Sources of selection criteria: Notice, Procurement Document

Criterion: Enrolment in a relevant professional register

Description of selection criterion: Declaration about the registration within a professional or trade register as prescribed by the legal provisions of the state where the bidder is based (see annex '01B_Self Declaration_Non-existence Reasons for Exclusion_EUOV2607')

Criterion: Enrolment in a trade register

Description of selection criterion: Declaration about the registration within a professional or trade register as prescribed by the legal provisions of the state where the bidder is based (see annex '01B_Self Declaration_Non-existence Reasons for Exclusion_EUOV2607')

5.1.10. Award criteria

Criterion:

Type: Quality

Name: Performance

Description: Criteria according to annex 01A

Category of award weight criterion: Weight (percentage, exact)

Award criterion number: 50

Criterion:

Type: Price

Name: Preis

Description: Evaluation price in accordance with annex 01A.

Category of award weight criterion: Weight (percentage, exact)

Award criterion number: 50

5.1.11. Procurement documents

Languages in which the procurement documents are officially available: English, German

Address of the procurement documents: https://www.tender24.de/NetServer/TenderingProcedureDetails?function=_Details&TenderOID=54321-Tender-19e4a84c1b5-d461b5d7c687ce9

5.1.12. Terms of procurement

Terms of submission:

Electronic submission: Allowed

Address for submission: <https://www.tender24.de>

Languages in which tenders or requests to participate may be submitted: English, German

Electronic catalogue: Not allowed

Variants: Not allowed

Tenderers may submit more than one tender: Not allowed

Deadline for receipt of tenders: 23/06/2026 12:00:00 (UTC+02:00) Eastern European Time, Central European Summer Time

Duration during which the tender must remain valid: 59 Days

Information that can be supplemented after the submission deadline:

At the discretion of the buyer, all missing tenderer-related documents may be submitted later.
Additional information: In accordance with legal requirements from Procurement Ordinance (VgV).

Information about public opening:

Opening date: 23/06/2026 12:03:00 (UTC+02:00) Eastern European Time, Central European Summer Time

Terms of contract:

The execution of the contract must be performed within the framework of sheltered employment programmes: No
Electronic invoicing: Allowed
Electronic ordering will be used: no
Electronic payment will be used: no

5.1.15. Techniques**Framework agreement:**

No framework agreement

Information about the dynamic purchasing system:

No dynamic purchase system

5.1.16. Further information, mediation and review

Review organisation: Vergabekammer des Bundes

Information about review deadlines: Legal remedies pursuant to Section 160 GWB: 1) The public procurement chamber shall only initiate a review procedure upon application; 2) Any company that has an interest in the public contract or concession is authorized to apply and asserts an infringement of its rights pursuant to Section 97 (6) GWB due to non-compliance with procurement regulations. It must be shown that the company has suffered or is at risk of suffering damage as a result of the alleged breach of the procurement regulations; 3) The application is inadmissible if: (1) The applicant has recognized the alleged breach of procurement regulations before submitting the application for review and has not notified the contracting authority of this within a period of 10 calendar days; the expiry of the deadline pursuant to Section 134 (2) GWB remains unaffected, (2) violations of procurement regulations that are recognizable on the basis of the contract notice are not notified to the contracting authority by the expiry of the deadline for application or submission of tenders specified in the contract notice at the latest, (3) violations of procurement regulations that are only recognizable in the procurement documents are not notified to the contracting authority by the expiry of the deadline for application or submission of tenders at the latest, (4) more than 15 calendar days have passed since receipt of the notification from the contracting authority that it does not intend to remedy a complaint. Sentence 1 shall not apply to an application for a declaration of invalidity of the contract pursuant to Section 135 (1) No. 2.

Organisation providing additional information about the procurement procedure: Helmholtz-Zentrum Dresden-Rossendorf e.V.

Organisation providing more information on the review procedures: Vergabekammer des Bundes

8. Organisations

8.1. ORG-7001

Official name: Helmholtz-Zentrum Dresden-Rossendorf e.V.

Registration number: 992-80200-35

Postal address: Bautzner Landstraße 400
Town: Dresden
Postcode: 01328
Country subdivision (NUTS): Dresden, Kreisfreie Stadt (DED21)
Country: Germany
Contact point: Abteilung Vergabe- und Beschaffungswesen
Email: dm-vergabe@hzdr.de
Telephone: +49 351260-0
Internet address: <https://www.hzdr.de>

Roles of this organisation:

Buyer
Organisation providing additional information about the procurement procedure

8.1. ORG-7004

Official name: Vergabekammer des Bundes
Registration number: -
Town: Bonn
Postcode: 53113
Country subdivision (NUTS): Bonn, Kreisfreie Stadt (DEA22)
Country: Germany
Email: vk@bundeskartellamt.bund.de

Roles of this organisation:

Review organisation

8.1. ORG-7005

Official name: Vergabekammer des Bundes
Registration number: --
Postal address: Kaiser-Friedrich-Str. 16
Town: Bonn
Postcode: 53113
Country subdivision (NUTS): Bonn, Kreisfreie Stadt (DEA22)
Country: Germany
Email: vk@bundeskartellamt.bund.de

Telephone: +49 2289499-0

Fax: +49 2289499-163

Roles of this organisation:

Organisation providing more information on the review procedures

8.1. ORG-7006

Official name: Datenservice Öffentlicher Einkauf (in Verantwortung des Beschaffungsamts des BMI)

Registration number: 0204:994-DOEVD-83

Town: Bonn

Postcode: 53119

Country subdivision (NUTS): Bonn, Kreisfreie Stadt (DEA22)

Country: Germany

Email: noreply.esender_hub@bescha.bund.de

Telephone: +49228996100

Roles of this organisation:

TED eSender

Notice information

Notice identifier/version: 46eca47d-04be-4c0c-9203-bbb478b352dd - 01

Form type: Competition

Notice type: Contract or concession notice – standard regime

Notice subtype: 16

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