

540796-2026 - Competition

Germany – Scanning electron microscopes – Rasterelektronenmikroskop - PR1253394-2790-W
OJ S 149/2026 05/08/2026
Contract or concession notice – standard regime
Supplies

1. Buyer

1.1. Buyer

Official name: Fraunhofer-Gesellschaft - Einkauf B12
Email: einkauf@zv.fraunhofer.de
Legal type of the buyer: Public undertaking
Activity of the contracting authority: General public services

2. Procedure

2.1. Procedure

Title: Rasterelektronenmikroskop - PR1253394-2790-W
Description: Rasterelektronenmikroskop
Procedure identifier: 22086c30-3d52-496e-b5d8-d6171825b1d3
Internal identifier: PR1253394-2790-W
Type of procedure: Negotiated with prior publication of a call for competition / competitive with negotiation
The procedure is accelerated: no

2.1.1. Purpose

Main nature of the contract: Supplies
Main classification (cpv): 38511100 Scanning electron microscopes

2.1.2. Place of performance

Town: Erlangen
Postcode: 91058
Country subdivision (NUTS): Erlangen, Kreisfreie Stadt (DE252)
Country: Germany

2.1.4. General information

Legal basis:
Directive 2014/24/EU
vgv -

2.1.6. Grounds for exclusion

Sources of grounds for exclusion: Notice, Procurement Document, European Single Procurement Document (ESPD)
Analogous situation like bankruptcy, insolvency or arrangement with creditors under national law:
Corruption:
Participation in a criminal organisation:
Agreements with other economic operators aimed at distorting competition:
Breaching of obligations in the fields of environmental law:

Money laundering or terrorist financing:
Fraud:
Child labour and including other forms of trafficking in human beings:
Insolvency:
Breaching of obligations in the fields of labour law:
Assets being administered by liquidator:
Misrepresentation, withheld information, unable to provide required documents or obtained confidential information of this procedure:
Conflict of interest due to its participation in the procurement procedure:
Direct or indirect involvement in the preparation of this procurement procedure:
Grave professional misconduct:
Early termination, damages, or other comparable sanctions:
Breaching of obligations in the fields of social law:
Breaching obligation relating to payment of social security contributions:
Business activities are suspended:
Breaching obligation relating to payment of taxes:
Terrorist offences or offences linked to terrorist activities:
Breaching of obligations set under purely national exclusion grounds: All relevant mandatory and optional grounds for exclusion stipulated by national law apply.

5. Lot

5.1. Lot: LOT-0000

Title: Rasterelektronenmikroskop - PR1253394-2790-W

Description: 1 Piece Scanning electron microscopy (SEM) is a widely used analytical tool for materials analysis, combining non-destructive, user-friendly operation with extensive possibilities for materials characterisation. In addition to imaging of material surfaces, SEM enables a variety of spectroscopic and diffraction-based methods for analysing chemical composition, crystallographic properties and structural defects. With a field-emission SEM (FE-SEM), a broad magnification range can be accessed, extending to sub-nanometre resolution. As a leading institute in the field of (ultra-)wide bandgap materials, we require an SEM that supports a broad range of materials-science characterisation tasks. These includes, in particular, the characterisation of (ultra-)wide band gap bulk crystals, fine-grained source materials, raw substrates with respect to intrinsic defects and residual damages e.g. from polishing processes, substrates with epitaxial layers for (opto-) electronic devices and fully processed device wafers. The key requirements for the intended SEM can be grouped into three main aspects: 1) An electron optical system providing state-of-the-art high lateral resolution down to the sub-nanometre range. This must be combined with a comprehensive detector set, including chamber-detectors for secondary (SE) and backscattered (BSE) electrons, as well as In-lens detectors for both SE and BSE electrons, with selectable energy ranges and clear separation of the respective signals. A field-free objective lens is preferred, without restrictions caused by magnetic reaction particles or focus problems arising from conductive channels (e.g. electron devices) tilted into the strong lens field. Acceleration voltage and beam current must be changed easily and independently between high-resolution and analytical operating conditions without much realignment. A technical solution for bypassing sample charging is required, since some of our materials are electrically insulating due to their wide bandgap or are mounted on insulating substrates. 2) A key requirement is the ability to investigate wafers using multiple techniques, such as electron channelling contrast imaging (ECCI) and cathodoluminescence (CL) analysis on the same region of interest (ROI). For wafers up to 8 inches, it must be possible to access any position from the centre to the

wafer edge without losing the ROI under preferred ECCI conditions, for example due to wafer rotation or repeatability-uncertainties during long-range x/y movements in automated data collection. For wafers up to 12 inches, the largest possible area should be accessible. For typically low dislocation densities ($< 10^4 \text{ cm}^{-2}$), high pixel numbers and a large field of view at low magnification, up to $400 \times 400 \text{ }\mu\text{m}$, are essential for comparing ECCI and CL results. The use of internally and externally recorded images, including images acquired by other techniques, shall be possible for sample navigation, enabling reliable relocation of selected features across the full wafer within a few micrometres. This is particularly important, when features are only visible at high magnification in non-standard electron images, such as CL-contrast or little dislocations in diffraction mode. 3) Automated data acquisition must be available for a wide range of capabilities. The system shall provide a comprehensive software solution for automated control of electron microscope functions and for freely arranging these functions within selected ROIs across the wafer. This shall be implemented through a modern, intuitive graphical user interface with a drag-and-drop workflow builder, allowing users to combine virtually any microscope function with defined ROI lists in any desired sequence including loops, conditional if/else logic and modular grouping of workflow elements. Automated imaging workflow shall not be limited to large field-of-view acquisition but must also enable high-resolution image acquisition. In addition, the system shall include integrated scripting capabilities that allow the execution of customer-specific Python codes, the extraction, modification and re-inclusion of Python subcodes to build up customised and advanced automation and data-processing recipes. Options 1.1.21 Software for evaluation of ECP pattern A Software, which allows indexing of diffraction lines and identifying tilt angles based on measured electron channelling patterns. 1.2.9 Additional feedthroughs Cable and nitrogen feedthroughs for an EBIC stage and a nitrogen cooling stage. 1.2.10 Plasma cleaner A plasma cleaner inside the main chamber. 1.4.11 Software for layered sample analyses Software for analysing layered samples with thicknesses from the nanometre to micrometre range is requested, based either on specified layer thicknesses or on individual layer compositions.

Internal identifier: LOT-0000

5.1.1. Purpose

Main nature of the contract: Supplies

Main classification (cpv): 38511100 Scanning electron microscopes

5.1.2. Place of performance

Town: Erlangen

Postcode: 91058

Country subdivision (NUTS): Erlangen, Kreisfreie Stadt (DE252)

Country: Germany

5.1.3. Estimated duration

Duration: 6 Months

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): yes

Additional information: #Also particularly suitable for:other-sme#

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: Financial ratio

Description of selection criterion: Information on turnover for the last 3 financial years This is NOT the only eligibility criterion. You can find the complete list of eligibility criteria here <https://vergabe.fraunhofer.de/NetServer/SelectionCriteria/54321-Tender-19fc6e0a694-6e3043a11711f8ec>

Information about the second stage of a two-stage procedure:

Minimum number of candidates to be invited for the second stage of the procedure: 3

5.1.10. Award criteria

Criterion:

Type: Quality

Name: Technical details

Description: Technical details

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

Award criterion number: 65

Criterion:

Type: Price

Name: Price

Description: Price

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

Award criterion number: 35

5.1.11. Procurement documents

Languages in which the procurement documents are officially available: German

Address of the procurement documents: https://vergabe.fraunhofer.de/NetServer/TenderingProcedureDetails?function=_Details&TenderOID=54321-Tender-19fc6e0a694-6e3043a11711f8ec

5.1.12. Terms of procurement

Terms of submission:

Electronic submission: Allowed

Address for submission: <https://vergabe.fraunhofer.de>

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

Electronic catalogue: Not allowed

Variants: Not allowed

Tenderers may submit more than one tender: Allowed

Deadline for receipt of requests to participate: 07/09/2026 10:00:00 (UTC+02:00) Eastern European Time, Central European Summer Time

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: See procurement documents

Terms of contract:

The execution of the contract must be performed within the framework of sheltered employment programmes: No

Conditions relating to the performance of the contract: In the event that subcontractors are used, they must be named and their suitability is likewise to be substantiated on the basis of the listed documents under "Tendering terms". Furthermore, it must be confirmed that they will be available if the order is placed; their share in the scope of the contractual object must be stated.

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: Vergabekammern des Bundes

Information about review deadlines: Applications for review are not permitted if more than 15 calendar days have passed since receipt of notification from the contracting authority that it is unwilling to redress an objection (section 160 (3) sentence 1 no. 4 of the German Competition Act (Gesetz gegen Wettbewerbsbeschränkungen, GWB)). Additionally, applications for review are not permitted if an award has been made before the public procurement tribunal has informed the contracting authority about the application for review (sections 168 (2) sentence 1 and 169 (1) GWB). Contracts may be awarded 15 calendar days after the tenderer information pursuant to section 134 (1) GWB has been sent. If the information is sent electronically or by fax, the period shall be reduced to ten calendar days (section 134 (2) GWB). The period shall begin on the day after which the contracting authority sends the information; the date of receipt by the tenderer and candidate in question shall be irrelevant. The admissibility of a review application also requires that the applicant notified the contracting authority about the claimed violations of public procurement provisions within ten calendar days of becoming aware of them (section 160 (3) sentence 1 no. 1 GWB). Violations of public procurement provisions which become apparent from the tender notice must be notified to the contracting authority by the end of the time limit for the application or the submission of a tender specified in the notice (section 160 (3) sentence 1 no. 2 GWB). Violations of public procurement provisions which only become apparent from the procurement documents must be notified to the contracting authority by the end of the time limit for the application or the submission of a tender (section 160 (3) sentence 1 no. 3 GWB).

Organisation providing additional information about the procurement procedure: Fraunhofer-Gesellschaft - Einkauf B12

Organisation providing more information on the review procedures: Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.

8. Organisations

8.1. ORG-7001

Official name: Fraunhofer-Gesellschaft - Einkauf B12

Registration number: DE 129515865

Postal address: Hansastraße 27c

Town: München

Postcode: 80686

Country subdivision (NUTS): München, Kreisfreie Stadt (DE212)

Country: Germany

Contact point: Einkauf Betrieb und Infrastruktur

Email: einkauf@zv.fraunhofer.de

Telephone: +49891205-0

Internet address: <https://vergabe.fraunhofer.de/>

Buyer profile: <https://vergabe.fraunhofer.de/NetServer/>

Roles of this organisation:

Buyer

Central purchasing body awarding public contracts or concluding framework agreements for works, supplies or services intended for other buyers

Organisation providing additional information about the procurement procedure

8.1. ORG-7004

Official name: Vergabekammern des Bundes

Registration number: t:022894990

Postal address: Kaiser-Friedrich-Straße 16

Town: Bonn

Postcode: 53113

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

Country: Germany

Email: vk@bundeskartellamt.bund.de

Telephone: +49 228 9499-0

Roles of this organisation:

Review organisation

8.1. ORG-7005

Official name: Fraunhofer-Gesellschaft zur Förderung der angewandten Forschung e.V.

Registration number: DE-129515865

Postal address: Hansastrasse 27c

Town: München

Postcode: 80686

Country subdivision (NUTS): München, Kreisfreie Stadt (DE212)

Country: Germany

Email: einkauf@zv.fraunhofer.de

Telephone: +49 89 1205-0

Internet address: <https://www.fraunhofer.de>

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:

Notice information

Notice identifier/version: 15d26078-fa74-4f3e-96fa-9be15091bfd8 - 01

Form type: Competition

Notice type: Contract or concession notice – standard regime

Notice subtype: 16

Notice dispatch date: 03/08/2026 19:54:43 (UTC+02:00) Eastern European Time, Central European Summer Time

Languages in which this notice is officially available: German, English

Notice publication number: 540796-2026

OJ S issue number: 149/2026

Publication date: 05/08/2026