

185586-2026 - Mise en concurrence

Allemagne – Diamants industriels – High Pressure High Temperature (HPHT) Diamonds

OJ S 54/2026 18/03/2026

Avis de marché ou de concession – régime ordinaire

Fournitures

1. Acheteur

1.1. Acheteur

Nom officiel: European X-Ray Free-Electron Laser Facility GmbH

Adresse électronique: tender@xfel.eu

Forme juridique de l'acheteur: Organisation qui passe un marché subventionné par un pouvoir adjudicateur

Activité du pouvoir adjudicateur: Enseignement

2. Procédure

2.1. Procédure

Titre: High Pressure High Temperature (HPHT) Diamonds

Description: This tender is adopted with Innovation Partnership Procedure which is a specific procurement method established under EU public procurement law (Directive 2014/24/EU), allowing public contracting authorities/companies to procure R&D services and the subsequent purchase of resulting innovative products, services or works in one integrated process. It is particularly useful when products or solutions do not exist on the market. The high-quality HPHT diamonds themselves are not inherently innovative. However, due to the current political situation, there is a lack of an established supply chain within Europe. The innovation in this case lies not in the material, but in its use: EuXFEL is pursuing the development of a prototype Diamond Double-Crystal Monochromator (Diamond DCM) using HPHT diamond, which provides significantly better thermal conductivity and quality than available CVD diamonds. Although silicon-based DCMs are already commercially available, diamond-based equivalents have not yet reached the market. Single Procedure: Combines R&D and subsequent commercial procurement, avoiding the need for a separate tender once the innovation is developed.

Identifiant de la procédure: 881cfa1c-db41-47e9-983f-f323f2f52d4c

Type de procédure: Partenariat d'innovation

2.1.1. Objet

Nature principale du marché: Fournitures

Nomenclature principale (cpv): 14522200 Diamants industriels

2.1.2. Lieu d'exécution

Subdivision pays (NUTS): Pinneberg (DEF09)

Pays: Allemagne

2.1.4. Informations générales

Base juridique:

Directive 2014/24/UE

vgv -

2.1.6. Motifs d'exclusion

Sources des motifs d'exclusion: Document de marché

5. Lot

5.1. Lot: LOT-0001

Titre: High Pressure High Temperature Diamonds

Description: Phase 0 : Call for Competition -Request to participate, stating their understanding of the technical specifications and the expectation from EuXFEL, the expected results, milestone achievements, and the requested achievable timeframe for each phase, as well as agree the overall production plan and estimated timeline at the final phase 4, details as stated in the tender documents (Technical Specification). -Bidders must provide a concise description confirming compliance with the technical specifications including the tolerances, requested project timeline and reporting period/time frame outlined in this document. If any required parameters cannot be met, the contractor must explicitly state so in the offer, along with details of the achievable parameters. -Initial offer must be submitted based on the requirements stated on the "High Pressure High Temperature (HPHT) Diamonds" specification, under 1.2 "Diamond plates specification"- "General Geometrical and Material Specifications", as informational purpose only -Complete & Sign Tender Forms Phase 1: Initial Development and Screening In this phase, maximum five (5) bidders will be selected from Phase 0 must each deliver one (1) diamond plate together with technical report in accordance with the requirements defined below. The delivered plate shall be characterized and submitted for evaluation by EuXFEL. EuXFEL reserves the right to shortlist fewer than five (5) bidders for this stage if one or more bidders do not meet the selection criteria for this phase. Phase 2: Process Optimization The objective of this phase is the optimization of the diamond growth and processing process to achieve a larger defect-free area while minimizing lattice strain. In this phase, the suppliers selected following Phase 1 must each deliver two (2) diamond plates with (100) crystallographic orientation with technical report on the requested timeframe in accordance with the requirements defined below. The delivered plates shall be characterized and submitted for evaluation by EuXFEL. Phase 3: Advanced Development for (110) Orientation The objective of this phase is the development and delivery of a high-quality diamond plate with (110) crystallographic orientation, which represents a more technically demanding configuration compared to the (100) orientation. In this phase, the suppliers selected following Phase 2 shall each deliver one (1) diamond plate in accordance with the requirements defined below. The delivered plate shall be characterized and submitted for evaluation by EuXFEL. If the analysis results of the 3rd crystal plate from any 2 or more than 2 bidders are identical. EuXFEL will request the bidders to submit their offers of the 4th plate of crystals with the final agreed specification at the end of Phase 3 for comparison, instead of at the beginning of Phase 4. Phase 4: Final Supply and Integration of the plates to the monochromator Delivery of two (2) diamond plates (100) oriented and two (2) diamond plates (110) oriented. Only 1 supplier will be selected on Phase 4. The selected bidder must submit the final offer at this phase. The price quoted on the final offer must be in Euro fix, not subject to escalation or variation. The price must include design, probing & testing, classification if applicable, technical report, delivery to the premises of EuXFEL and include all labeling, packaging and insurance as well as factory acceptance tests (FAT), but exclude Value Added Tax (VAT) as well as customs duties. By submitting the final offer, the terms and conditions of this innovation partnership procedure are accepted.

Identifiant interne: LOT-0001 XRO-CT32310

5.1.1. Objet

Nature principale du marché: Fournitures
Nomenclature principale (cpv): 14522200 Diamants industriels

5.1.2. Lieu d'exécution

Subdivision pays (NUTS): Pinneberg (DEF09)
Pays: Allemagne
Informations complémentaires: None

5.1.3. Durée estimée

Autre durée: Inconnu

5.1.6. Informations générales

Participation réservée:

La participation n'est pas réservée.

Projet de passation de marché non financé par des fonds de l'UE

Le marché relève de l'accord sur les marchés publics (AMP): non

Le marché en question convient aussi aux petites et moyennes entreprises (PME): oui

Informations complémentaires: #Besonders auch geeignet für:freelance#, #Besonders auch geeignet für:startup#, #Besonders auch geeignet für:other-sme#, #Besonders auch geeignet für:selbst#

5.1.7. Marché public stratégique

Objectif du marché public stratégique: Achat innovant

Description: This tender is adopted with Innovation Partnership Procedure which is a specific procurement method established under EU public procurement law (Directive 2014/24/EU), allowing public contracting authorities/companies to procure R&D services and the subsequent purchase of resulting innovative products, services or works in one integrated process. It is particularly useful when products or solutions do not exist on the market. This tender includes Phase 0 to Phase 4. The high-quality HPHT diamonds themselves are not inherently innovative. However, due to the current political situation, there is a lack of an established supply chain within Europe. The innovation in this case lies not in the material, but in its use: EuXFEL is pursuing the development of a prototype Artificial Channel-Cut Monochromator (ACCM) using HPHT diamond, which provides significantly better thermal conductivity and quality than available CVD diamonds. Although silicon-based ACCMs are already commercially available, diamond-based equivalents have not yet reached the market. Single Procedure: Combines R&D and subsequent commercial procurement, avoiding the need for a separate tender once the innovation is developed.

L'achat public innovant: Les travaux, fournitures ou services acquis impliquent des activités de recherche et de développement.

5.1.9. Critères de sélection

Sources des critères de sélection: Document de marché

Informations sur la seconde étape d'une procédure en deux étapes:

Nombre minimal de candidats à inviter pour la seconde étape de la procédure: 3

Nombre maximal de candidats à inviter pour la seconde étape de la procédure: 5

La procédure se déroulera en plusieurs étapes. À chaque étape, certains candidats peuvent être éliminés

5.1.10. Critères d'attribution

Critère:

Type: Qualité

Description: Selection criteria for Phase 0: Phase 0 - Selection suitability criteria for invitation for next Phase (Phase 1): A total of 100 points can be achieved when evaluating references. References (3 References – experience as a company in projects of similar characteristics within the last ten years stated on the Tender Forms) are evaluated by comparing applicants with each other based on the following scale/grading system. The maximum number of points is multiplied by the respective weighting factor (percentage)– multiplied by the respective weighting factor (percentage). - 100% = very good: The applicant meets the requirements for the suitability criterion to the highest degree, - 80% = good: Applicant meets the requirements for the suitability criterion to the highest degree, - 60% = fully satisfactory: The applicant meets the suitability criteria to a high degree to a high degree, - 40% = satisfactory: Applicant meets the requirements for the suitability criterion to a sufficient degree, - 20% = adequate: Applicant meets the requirements for the eligibility criterion to a barely sufficient degree. In the range between 0% and 100%, intermediate values can be formed to take into account a tendency toward the higher grade level (10%, 30%, 50%, 70%, 90%), which be assigned to the respective grade level with the straight percentage below it. An assessment of an aptitude criterion (performance or expertise) with 10% would correspond to a complete failure to meet the respective suitability criterion, which would result in the exclusion of the application for participation (knockout criterion). The above criteria are suitability criteria, not award criteria. EuXFEL aims to select maximum 5 bidders/applicants in Phase 1. If no 3 bidders/applicants are similarly qualified in terms of meeting the minimum requirements or total points, only those applicants who are sufficiently suitable will be included. If several applicants/bidders achieve the same total score and the number of applicants/bidders exceeds the planned number to be invited to the next phase, EuXFEL reserves the right to select among the remaining applicants with the same score by drawing lots. These criteria will be used to determine which applicants will be invited to the next phase of the process.

5.1.11. Documents de marché

Langues dans lesquelles les documents de marché sont officiellement disponibles: anglais

Adresse des documents de marché: <https://www.subreport.de/E29531557>

5.1.12. Conditions du marché public

Conditions de soumission:

Soumission par voie électronique: Requise

Adresse de soumission: <https://www.subreport.de/E29531557>

Langues dans lesquelles les offres ou demandes de participation/candidatures peuvent être présentées: allemand

Catalogue électronique: Non autorisée

Variantes: Non autorisée

Les soumissionnaires peuvent présenter plusieurs offres: Non autorisée

Date limite de réception des demandes de participation/candidatures: 20/04/2026 12:00:00 (UTC+02:00) Heure de l'Europe orientale, heure d'été de l'Europe centrale

Informations qui peuvent être complétées après la date limite de réception des offres:

À la discrétion de l'acheteur, tous les documents manquants relatifs au soumissionnaire peuvent être transmis ultérieurement.

Informations complémentaires: None

Conditions du marché:

Le contrat doit être exécuté dans le cadre de programmes d'emplois protégés: Non

Facturation électronique: Autorisée

La commande en ligne sera utilisée: oui

Le paiement électronique sera utilisé: oui

5.1.15. Techniques

Accord-cadre:

Pas d'accord-cadre

Informations sur le système d'acquisition dynamique:

Pas de système d'acquisition dynamique

5.1.16. Informations complémentaires, médiation et recours

Organisation chargée des procédures de recours: Vergabekammer des Bundes beim Bundeskartellamt Registration number: +49 022894990 Country subdivision (NUTS): Bonn, Kreisfreie Stadt (DEA22) Country: Germany Roles of this organisation: Review organisation Mediation organisation

Description des délais d'introduction des procédures de recours: The legal regulations applied Organisation qui fournit des précisions concernant l'introduction des recours: European X-Ray Free-Electron Laser Facility GmbH

8. Organisations

8.1. ORG-0001

Nom officiel: European X-Ray Free-Electron Laser Facility GmbH

Numéro d'enregistrement: DE815117472

Adresse postale: Holzkoppel 4

Ville: Schenefeld

Code postal: 22869

Subdivision pays (NUTS): Pinneberg (DEF09)

Pays: Allemagne

Adresse électronique: tender@xfel.eu

Téléphone: +49 (0)40 8998-6768

Adresse internet: <https://www.xfel.eu>

Rôles de cette organisation:

Acheteur

Organisation qui fournit des précisions concernant l'introduction des recours

8.1. ORG-0002

Nom officiel: Vergabekammer des Bundes beim Bundeskartellamt Registration number: +49 022894990 Country subdivision (NUTS): Bonn, Kreisfreie Stadt (DEA22) Country: Germany Roles of this organisation: Review organisation Mediation organisation

Numéro d'enregistrement: Telephone: +49 22894990

Ville: Bonn

Code postal: 53113

Subdivision pays (NUTS): Bonn, Kreisfreie Stadt (DEA22)

Pays: Allemagne

Adresse électronique: vk@bundeskartellamt.bund.de

Téléphone: +49 22894990

Rôles de cette organisation:

Organisation chargée des procédures de recours

8.1. ORG-0003

Nom officiel: Datenservice Öffentlicher Einkauf (in Verantwortung des Beschaffungsamts des BMI)

Numéro d'enregistrement: 0204:994-DOEVD-83

Ville: Bonn
Code postal: 53119
Subdivision pays (NUTS): Bonn, Kreisfreie Stadt (DEA22)
Pays: Allemagne
Adresse électronique: noreply.esender_hub@besch.bund.de
Téléphone: +49228996100
Rôles de cette organisation:
TED eSender

Informations relatives à l'avis

Identifiant/version de l'avis: 0dbe963b-28bf-4873-aac4-a10503b6e24b - 01
Type de formulaire: Mise en concurrence
Type d'avis: Avis de marché ou de concession – régime ordinaire
Sous-type d'avis: 16
Date d'envoi de l'avis: 16/03/2026 09:08:40 (UTC+01:00) Heure de l'Europe centrale, heure d'été de l'Europe occidentale
Langues dans lesquelles l'avis en question est officiellement disponible: allemand
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