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**France-Gif-sur-yvette: Research and experimental development services  
2021/S 191-495906**

**Prior information notice**

**This notice is for prior information only**

**Services**

**Legal Basis:**

Directive 2014/24/EU

**Section I: Contracting authority**

I.1) **Name and addresses**

Official name: SYNCHROTRON SOLEIL  
National registration number: 439 684 903  
Postal address: L'ORME DES MERISIERS  
Town: Gif-sur-yvette  
NUTS code: FR104 Essonne  
Postal code: 91190  
Country: France  
E-mail: [achats@synchrotron-soleil.fr](mailto:achats@synchrotron-soleil.fr)  
Telephone: +33 169359509

**Internet address(es):**

Main address: <https://leaps-superflat.eu>

I.1) **Name and addresses**

Official name: Consorcio para la Construcción, Equipamiento y Explotación del Laboratorio de Luz Sincrotrón  
National registration number: Q0801209H  
Postal address: C/ Llum, 2-26  
Town: Cerdanyola del Vallés  
NUTS code: ES511 Barcelona  
Postal code: 08290  
Country: Spain  
E-mail: [achats@synchrotron-soleil.fr](mailto:achats@synchrotron-soleil.fr)

**Internet address(es):**

Main address: <https://leaps-superflat.eu>

I.1) **Name and addresses**

Official name: Deutsches Elektronen-Synchrotron DESY  
National registration number: DE118714904  
Postal address: Notkestraße 85  
Town: Hamburg  
NUTS code: DE600 Hamburg  
Postal code: 22607  
Country: Germany  
E-mail: [achats@synchrotron-soleil.fr](mailto:achats@synchrotron-soleil.fr)

**Internet address(es):**

Main address: <https://leaps-superflat.eu>

I.1) **Name and addresses**

Official name: Diamond Light Source Ltd  
Postal address: Diamond House, Harwell Science and Innovation Campus  
Town: Didcot  
NUTS code: UK United Kingdom  
Postal code: OX11 0DE  
Country: United Kingdom  
E-mail: [achats@synchrotron-soleil.fr](mailto:achats@synchrotron-soleil.fr)

**Internet address(es):**

Main address: <https://leaps-superflat.eu>

I.1) **Name and addresses**

Official name: European synchrotron radiation facility  
Postal address: 71 rue des Martyrs - BP 220  
Town: Grenoble  
NUTS code: FRK24 Isère  
Postal code: 38043  
Country: France  
E-mail: [achats@synchrotron-soleil.fr](mailto:achats@synchrotron-soleil.fr)

**Internet address(es):**

Main address: <https://leaps-superflat.eu>

I.1) **Name and addresses**

Official name: European X-Ray Free-ElectronLaser Facility GmbH  
Postal address: Holzkoppel 4  
Town: Schenefeld  
NUTS code: DEF09 Pinneberg  
Postal code: 22869  
Country: Germany  
E-mail: [achats@synchrotron-soleil.fr](mailto:achats@synchrotron-soleil.fr)

**Internet address(es):**

Main address: <https://leaps-superflat.eu>

I.1) **Name and addresses**

Official name: Helmholtz-Zentrum Berlin für Materialien und Energie GmbH (HZB)

Postal address: Hahn-Meitner-Platz 1

Town: Berlin

NUTS code: DE300 Berlin

Postal code: 14109

Country: Germany

E-mail: [achats@synchrotron-soleil.fr](mailto:achats@synchrotron-soleil.fr)

**Internet address(es):**

Main address: <https://leaps-superflat.eu>

I.1) **Name and addresses**

Official name: Paul Scherrer Institut

Postal address: Forschungsstrasse

Town: Villigen

NUTS code: CH0 Schweiz / Suisse / Svizzera

Postal code: 5232

Country: Switzerland

E-mail: [achats@synchrotron-soleil.fr](mailto:achats@synchrotron-soleil.fr)

**Internet address(es):**

Main address: <https://leaps-superflat.eu>

I.1) **Name and addresses**

Official name: Lunds universitet

National registration number: 202100-3211

Postal address: Box 117

Town: Lund

NUTS code: SE224 Skåne län

Postal code: 221 00

Country: Sweden

E-mail: [achats@synchrotron-soleil.fr](mailto:achats@synchrotron-soleil.fr)

**Internet address(es):**

Main address: <https://leaps-superflat.eu>

I.2) **Information about joint procurement**

The contract involves joint procurement

In the case of joint procurement involving different countries, state applicable national procurement law:

The applicable national procurement law is French law and specific requirements for PCP/PPI supported by Horizon 2020 grants. This PCP is carried out by Synchrotron SOLEIL appointed as lead procurer.

I.3) **Communication**

The procurement documents are available for unrestricted and full direct access, free of charge, at: <https://leaps-superflat.eu>

Additional information can be obtained from the abovementioned address

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

Body governed by public law

I.5) **Main activity**

Other activity: research

**Section II: Object**

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

- II.1.1) **Title:**  
SUPERFLAT PCP Process development for manufacture of flat X-ray mirrors  
Reference number: LEAPS SUPERFLAT 2021
- II.1.2) **Main CPV code**  
73100000 Research and experimental development services
- II.1.3) **Type of contract**  
Services
- II.1.4) **Short description:**  
This PIN provides early information about the expected starting date for a pre-commercial procurement (PCP) and about the open market consultation that is organised in preparation of this procurement.  
The procurement aims to trigger new solutions to be developed and tested to address the following challenge: manufacturing 500 mm long flat silicon X-ray prototype mirrors with < 50 nanoradian rms slope and < 1 nm p.v. figure errors.  
This PCP procurement is a joint procurement by different procurers across Europe.
- II.1.5) **Estimated total value**  
Value excluding VAT: 1 000 000.00 EUR
- II.1.6) **Information about lots**  
This contract is divided into lots: no
- II.2) **Description**
- II.2.3) **Place of performance**  
NUTS code: FR104 Essonne
- II.2.4) **Description of the procurement:**  
The procurement will take the form of a pre-commercial procurement (PCP) that is expected to start on 13 January 2022 and end in March 2025 at the latest. The PCP will award R&D services contracts to a number of R&D providers in parallel to compare competing alternative solutions. This will be done in a phased approach with a framework agreement that covers 3 R&D phases (solution design, prototyping, pilot deployments made available to end users from the research communities supported by the buyers group) with intermediate evaluations after each phase that will progressively select the best competing solutions that will be offered a specific contract for the next phase. Testing of the prototypes is expected to take place at one of the buyer's premises by experts and end-users and in this way the PCP will provide a first customer test reference to participating R&D providers.  
This PCP will develop flat X-ray mirrors with optical apertures in excess of 500 mm long and 30 mm wide; slope and figure errors below 50 nanoradians and 1 nm respectively; with sub 0.1 nm roughness. The objective is to improve the quality of X-ray mirrors in response to the evolving needs of accelerator-based X-ray light sources. The initiative is driven in particular by the construction and upgrade of many European user facilities to provide ultra-low emittance X-ray beams for scientists and engineers working in applications addressing many of the global challenges targeted by the Horizon Europe program of the European Commission. To harness their full potential, these facilities require reflective optics of unprecedented quality. The technical challenges include the implementation of reliable and repeatable surface processing tools coupled with accurate metrology. The final result of the PCP will be at least two prototype mirrors produced by a demonstrably controlled manufacturing process. Apart from the direct benefits to the European light sources, the results of this PCP will also act to enhance European industrial competitiveness in this domain.
- II.2.14) **Additional information**

This procurement receives funding under the European Union's Horizon 2020 Research and Innovation Programme, under the grant agreement No No101004728 – LEAPS-INNOV. The EU has awarded a grant for this procurement but is not participating as a contracting authority in the procurement.

- II.3) **Estimated date of publication of contract notice:**  
13/01/2022

**Section IV: Procedure**

- IV.1) **Description**

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

The procurement is covered by the Government Procurement Agreement: no

**Section VI: Complementary information**

- VI.3) **Additional information:**

This PIN is published to announce an open market consultation on a future procurement procedure. The PIN is not a commitment to procure.

All interested operators are invited to take part in an online open market consultation that will take place on 19 November 2021 and are requested to register online by 16 November 2021 at the latest by registering via the following website: <https://leaps-superflat.eu> Information about the PCP and Q&A provided during and as a result of the open market consultation will be available via the same website.

This PIN and the open market consultation are not part of any pre-qualification or selection process.

Responding to this PIN and attending the open market consultation is not a prerequisite for participation in any subsequent procurement.

- VI.5) **Date of dispatch of this notice:**  
27/09/2021