

EOSC Future

Contract Notice Services

Legal Basis:

Directive 2014/24/EU

Section I: Contracting authority

I.1) Name and addresses

Official name: EGI Foundation

National registration number: VAT NL 8219.84.986.B.01 Postal address: Science Park 140

Town: Amsterdam

NUTS code: NL32 Noord-Holland Postal code: 1098XG

Country: Netherlands

Contact person: Mrs. Elisa Cauhe

E-mail: elisa.cauhe@egi.eu

Internet address(es):

Main address: https://www.egi.eu/

Address of the buyer profile: https://www.egi.eu/tender-eosc-dih-2023/

I.3) Communication

The procurement documents are available for unrestricted and full direct access, free of charge, at: https://www.egi.eu/tender-eosc-dih-2023/

Additional information can be obtained from the abovementioned address

Tenders or requests to participate must be submitted electronically via: <u>business@egi.eu</u>

I.4) Type of the contracting authority

Other type: Foundation

I.5) Main activity

Other activity: ICT

Section II: Object

II.1) Scope of the procurement

II.1.1) Title:

Purchase of software/service for image analysis in phenological research with implementation, licensing, support and maintenance

Reference number: EGI-2023-001

II.1.2) Main CPV code

72200000 Software programming and consultancy services - FG11

II.1.3) Type of contract

Services

II.1.4) Short description:

The proposed tool will allow to solve the problems of automation and efficient application of ML tools in time series analysis of images from phenological imaging of: 1) crop plants, their vegetative or generative parts, in order to predict their yield under climate change conditions; 2) ecosystems towards the analysis of key species development during the growing season in the context of carbon and water balance studies in order to describe quantitatively and qualitatively the impact of climate change on ecosystem functioning

II.1.5) Estimated total value

Value excluding VAT: 180 000.00 EUR

II.1.6) Information about lots

This contract is divided into lots: no





II.2) Description

II.2.2) Additional CPV code(s)

72600000 Computer support and consultancy services - FG11

II.2.3) Place of performance

Main site or place of performance:

Apple production area within the European Union

II.2.4) Description of the procurement:

Phenology is the science of how vegetation changes over time, and classical phenological research focuses on observations of seasonal events such as budding, flowering, fruiting and ageing. This scientific discipline is of growing interest and attracts the attention not only of the wider public or scientists, but also of the agri- food and forestry sectors. The reason for this is that both the onset and duration of the various stages of plant development are dictated by environmental conditions, but also by human activities. In this way, vegetation analysis also provides direct information on the conditions under which the vegetation cover functions in the landscape. Such observations are also of particular importance in the context of assessing the response of vegetation to progressive climate change, with increasingly frequent droughts affecting both the condition and occurrence of plants in the environment.

Phenological stages can be detected by different methods such as individual observations, near-surface measurements and satellite remote sensing. In the case of near-surface observations digital phenological imaging with time-lapse cameras is used in scientific and engineering projects. The aim of that activities is to understand phenological characteristics of plants both in croplands and in non-productive ecosystems.

More and more phenotyping cameras dedicated to specialised practical solutions and for basic research are appearing on the market. However, there are no available open tools to facilitate the collection of such data and their analysis using machine learning (ML) techniques. The proposed tool will allow to solve the problems of automation and efficient application of ML tools in time series analysis of images from phenological imaging

of: 1) crop plants, their vegetative or generative parts, in order to predict their yield under climate change conditions; 2) ecosystems towards the analysis of key species development during the growing season in the context of carbon and water balance studies in order to describe quantitatively and qualitatively the impact of climate change on ecosystem functioning. The proposed tool aims to address the lack of IT tools for efficient storage, processing and analysis of phenological images through the use of ML.

II.2.5) Award criteria

Criteria below

Quality criterion - Name: See Tender Specifications

Weighting: 70%

Price - Weighting: 30%

II.2.6) Estimated value

Value excluding VAT: 180 000.00 EUR

II.2.7) Duration of the contract, framework agreement or dynamic purchasing system Duration in months: 5

This contract is subject to renewal: no





II.2.10) Information about variants

Variants will be accepted: no

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: yes Identification of the project:

Grant Agreement n° 101017536 signed by the beneficiary parties of the European project "EOSC Future Project" co-funded by the European Union Horizon Programme call INFRAEOSC-03-2020

II.2.14) Additional information: Please consult tender specifications

III .Section III: Legal, economic, financial and technical information

III.1) Conditions for participation

III.1.1) Suitability to pursue the professional activity, including requirements relating to enrolment on professional or trade registers

List and brief description of conditions:

A legally constituted company whose corporate purpose includes the activities inherent to this contract. Please consult procurement documents

III.1.2) Economic and financial standing

Selection criteria as stated in the procurement documents

III.1.3) Technical and professional ability

Selection criteria as stated in the procurement documents

III.2) Conditions related to the contract

III.2.2) Contract performance conditions: See procurement documents

Section IV: Procedure

IV.1) Description

IV.1.1) Type of procedure: Open procedure





IV.2) Administrative information

IV.2.2) Time limit for receipt of tenders or requests to participate

Date: 15/03/2023, 23:59 CET

IV.2.3) Estimated date of dispatch of invitations to tender or to participate to selected candidates

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

English

IV.2.6) Minimum time frame during which the tenderer must maintain the tender

Tender must be valid until: 10/04/2023

Section VI: Complementary information

VI.1) Information about recurrence

This is a recurrent procurement: no

VI.2) Information about electronic workflows:

Electronic invoicing will be accepted Electronic payment will be used

VI.3) Additional information:

payment within 30 days after validation of the corresponding milestones