

**INFORMATION NOTICE N.IBIMET-SS-1-2015 Public Procurement**  
**Contract Reference Number Z27132032E**

Pursuant to the determination to stipulate a contract Prot. N. 241 of February 9, 2015, in compliance with the principles set out in art. 2 of Legislative Decree No 163 of April 12, 2006 concerning the regulation of public procurement regarding works, services and supplies, in order to select the Economic Operators that shall be invited to take part in the procurement process as regulated by Art. 125 (II), of Legislative Decree N.163 of 12/04/2006, the current Notice is published.

*Contracting Authority:*

NATIONAL RESEARCH COUNCIL OF ITALY  
INSTITUTE OF BIOMETEOROLOGY – SASSARI

*Procurement procedure:*

Negotiated procedure, Art. 125 (clause I) (letter b) of Legislative Decree No 163 of April 12, 2006.

*Object of the contract:*

Provision of services to support the research and development activities of the project ECOSCALE.

*Maximum amount estimated:*

€ 25.000,00 (twenty-five thousand/00 euro) VAT not included.

*Detailed description of the required works/services/supplies:*

SERVICE IN SUPPORT OF RESEARCH AND DEVELOPMENT ACTIVITIES OF THE PROJECT ECOSCALE.

The supply consists of a specialist service supporting the research and development activities dedicated to the development of a semi-automated software application for the analysis of digital “phenological” images. Digital images to be analyzed were acquired with a phenology monitoring system projected for Mediterranean shrub ecosystems, based on the acquisition and analysis of high-resolution digital images. The system is constituted by an equipment for the images acquisition connected to a robotic head that allows the complete automation of the system. The system is programmed to monitor a panorama with the horizontal FOV (Field of View) of 227°, the vertical FOV of 36° height. Each single frame is acquired in raw and jpg format, in average 75 MB per each shoot in the raw format.



Moreover, a digital images time series, with variable length time series, acquired on a daily basis from May 2012, will be available. The individual shoots have an average size of 30 MB in raw format (10-15 MB in JPG format), and the monitored panorama has the horizontal FOV (Field of View) of 180°, the vertical FOV of 30°, and depth of field of 12 meters. Both datasets will be used in this work/service.

In particular, it is required to development of an automated system for the process of extracting the phenological information contained in the recorded digital images. The implementation of the system will have to be achieved through several stages:

- development of an automated work-flow for the preliminary analysis of the images collected in the field, in order to identify and correct any mistakes made during the process of acquisition and registration of images, and, when possible, to limit their influence in the following stage of data processing.
- development of an application software to perform automated routine analysis for identifying the changes in the color spectra of time series of frames, and calculating specific indices indicative of the physiological status of the vegetation.
- Development of a specific tool for the analysis of spectral properties of vegetation (RGB indices, color coordinates) based on the application of statistical methods.

The provision of this specialist service must also include the implementation of a study for investigating the potential of the monitoring system used in other areas of application, and, in particular, for evaluating the potential of the integrated monitoring system, and the methods and tools developed for the analysis of the data extracted from the digital imagery.

Finally, technical-scientific reports describing the progress of the work must be written in English and with the support of CNR-IBIMET research staff. Reports must also contain details on the performance of the integrated monitoring system and accurate description of the technical results. The results obtained during the processing of data will be then used for producing scientific papers written in English. This activity will be conducted in collaboration with CNR-IBIMET research staff.

*Tender selection criteria:*

Criteria of the most economically advantageous tender referred to art. 83 of the Legislative Decree 163/2006.

*Identification of the Economic operator:*

Therefore, Economic Operators interested in taking part in the selection process of this Tender are required to send a formal Application, enclosing a photocopy of a valid identification document of the legal representative of the company, within and no later than March 3, 2015.

The Application must be sent through email at the following address: [d.murgia@ibimet.cnr.it](mailto:d.murgia@ibimet.cnr.it); or through postal registered mail with acknowledgment of receipt at the following address: Istituto di Biometeorologia, CNR - IBIMET, Traversa La Crucca n. 3, 07100 Sassari, Italy. Please, on the envelope containing the application write the following caption: "**Avviso d'informazione n. IBIMET-SS-1-2015**".

The Application must contain the following information:

- Legal company name, address, fax and e-mail;

- Social security and insurance positions numbers;
- Declaration that the Applicant does not fall into any of the causes of exclusion in Article 38 of Legislative Decree no. 163/2006;
- Address where the Applicant wants to receive any documentation regarding the tender process.

For Applications sent by postal registered mail, the date of the stamp of acceptance affixed by the Administrative Secretariat of IBIMET will serve as proof.

Once all Applications have been received, the Contracting Authority shall proceed to the identification of the economic operators to be invited to tender.

The publication of this Notice and the Expression of Interest by the Economic Operators shall in no way bind the Institute of Biometeorology to proceed with the invitation to tender under this procedure.

*Tender Manager:*

Mr. Pierpaolo Masia telefono +39 079 2841520 e-mail p.masia@ibimet.cnr.it

*Clarifications:*

- Once Applications have been received, the Contracting Authority shall proceed with the identification of the Economic Operators to be invited to tender.
- The publication of this Notice and the Expression of Interest by the Economic Operators do not bind in any way the Contracting Authority and do not grant any rights to Applicants in a possible participation in the award procedure.
- The Contracting Authority reserves the right to proceed to the award in the presence of only one valid bid.
- The Contracting Authority reserves the right to do not proceed to the award of the supply in case none of the proposal received are deemed suitable, and also reserves the right to revoke, suspend, modify or not to award the procedure when it deems just and proper; in such cases, applicants will be promptly notified through the website [www.urp.cnr.it](http://www.urp.cnr.it), and no refund or compensation will be due to them.
- The data and information collected will be used solely for the purpose of this award procedure, in compliance with Legislative Decree no. 196/2003.

This Notice, intended only to receive Expressions of Interest to facilitate the participation of the largest number of Economic Operators, is published on the web site [www.urp.cnr.it](http://www.urp.cnr.it), Section "Gare e Appalti".

The Responsible of the CNR IBIMET Sassari  
Istitute of Biometeorology  
Dott. Pierpaolo Duce

