

CALL FOR GRANT APPLICATIONS (AE2024-0237)

INESC TEC is now accepting grant applications to award 1 Research Grant (BI) on the scope InterStore with reference 101096511 funded by the European Commission under the Horizon Europe program for the period 2021-2027.

1. GRANT DESCRIPTION

Type of grant: Research Grant (BI)

General scientific area: ENGINEERING, COMPUTER SCIENCE, MATHEMATICS

Scientific subarea: Electrical engineering, Informatics, Applied mathematics

Area of Work: POWER SYSTEMS - DISTRIBUTED ENERGY RESOURCES

Grant duration: 12 months, starting on 2024-09-01, with the possibility of being renewed until the end of the project.

Scientific advisor: Alexandre Lucas

Workplace: INESC TEC, Porto, Portugal

Maintenance stipend: € 990,98 or 1259,64, [according to the table of monthly maintenance stipend for FCT grants](#), paid via bank transfer. Grant holders may be awarded potential supplements, according to a quarterly evaluation process (Articles 19, 21 and 22 of the [Regulations for Grants of INESC TEC and Annex II](#)), up to a maximum limit of 50% of the monthly maintenance stipend.

INESC TEC supports costs with registration, enrolment or tuition fees, during the grant duration, under the terms established in the internal document: "[Payment of Tuition fees to grant holders](#)".

The grant holder will benefit from health insurance, supported by INESC TEC.

2. OBJECTIVES:

The overall vision of InterSTORE is to deploy and demonstrate a set of interoperable Open-Source tools to integrate Distributed Energy Storage (DES) and Distributed Energy Resources (DER), to enable the hybridization, utilisation and monetisation of storage flexibility, within a real-life environment. The project outcome will allow various DES, DER and several new generation Energy Management Systems (EMS) to be integrated by different stakeholders, while demonstrating the value added of asset's connection to common data space, reducing uncertainty and hence increasing acceptance by technology takers and final users.

The main objectives of the Fellowship are:

- 1) Apply data analytics and identify energy use cases for the valorization of data from connected data spaces.
- 2) Perform forecasts and baseline creation for EVs and other generic loads to be supplied by hybrid storage systems.

3. BRIEF PRESENTATION OF THE WORK PROGRAMME AND TRAINING:

A visão geral do InterSTORE é implantar e demonstrar um conjunto de ferramentas interoperáveis de código aberto para integrar o armazenamento distribuído de energia (DES) e os recursos de energia distribuída (DER), para permitir a hibridização, utilização e monetização da flexibilidade de armazenamento, dentro de um ambiente da vida real. O resultado do projeto permitirá que vários DES, DER e vários Sistemas de Gestão de Energia (SGE) de nova geração sejam integrados por diferentes partes interessadas, ao mesmo tempo que demonstra o valor acrescentado da ligação dos ativos ao espaço de dados comum, reduzindo a incerteza e, consequentemente, aumentando a aceitação por parte dos tomadores de tecnologia e utilizadores finais.

Os principais objetivos da bolsa são:

- 1) Aplicar análise de dados e identificar casos de uso de energia para a valorização de dados de Connected dataspaces (espaços de dados conectados).
- 2) Realizar previsões e criação de linha de base para EVs e outras cargas genéricas a serem fornecidas por sistemas de armazenamento híbridos.

4. REQUIRED PROFILE:

Admission requirements:

The awarding of the fellowship is dependent on the applicants' enrolment in study cycle or non-award courses of Higher Education Institutions.

Preference factors:

- Past experience (or academic background) with energy data analytics
- Experience with simulation techniques that model the behavior of individual agents (organizations or people), and their interactions in a system.
- Academic background experience and research oriented

Minimum requirements:

- Academic background in electrical engineering, computer science, mathematics, industrial engineering, informatics or similar
- Programming knowledge in Python
- Fluent in English

5. EVALUATION OF APPLICATIONS AND SELECTION PROCESS:

Selection criteria and corresponding valuation: the first phase comprises the Academic Evaluation (AC), based on the criteria referred to in Article 12 of the [Regulations for Grants of INESC TEC](#), while the second phase comprehends the Individual Interview (EI). All factors are evaluated on a scale of 0 to 100, taking into account the applicants' merit, suitability and conformity with the preference factors.

The weight of the AC factors are as follows: Academic Qualifications (FA, 50%), Scientific Publications (PC, 20%), Experience (EX, 20%) and Motivation Letter (CM, 10%).

Candidates who score less than 50 points in the AC average will be considered excluded on absolute merit. The top five candidates approved on absolute merit will be qualified for the individual interview. The Final Grade (CF) is obtained by the weighted average of AC (70%) and EI (30%).

DISABILITY INCENTIVE

Candidates who present a degree of disability equal to or greater than 90% will benefit from an incentive (20) in the score of the CV Assessment.

Candidates who present a degree of disability equal to or greater than 60% and less than 90% will also benefit from an incentive (10) in the score of the CV Assessment.

Said score may, in these cases, exceed 100 points.

Candidates must demonstrate the degree of disability during the application, namely through the submission of the Multi-Purpose Medical Certificate of Disability, issued in accordance with Decree-Law no. 202/96, of October 23 - currently in effect.

Candidates must declare, in the application form, the type of disability used throughout the selection process, in order to proceed with the required adaptations.

The Selection Jury is composed of the following members:

- President of the Jury: Alexandre Lucas
- Full member: José Villar
- Full member: Filipe Joel Soares
- Substitute member: Ricardo Jorge Bessa

Release of results and prior hearing: the results of the selection process, as well as the terms and procedures for prior hearing, will be released to the applicants by email, under the terms referred to in Article 13 of the Regulations for Studentships and Fellowships of INESC TEC.

6. FORMALISATION OF APPLICATIONS:

Application Documents:

1. Motivation letter;
2. Curriculum Vitae (must include the list of previous fellowships, their type, beginning and end dates, funding entities and host institutions);
3. Certificate or diploma degree;
4. Proof of enrollment in a degree awarding study cycle or in a non degree awarding Higher Education program.
 - The proof of enrollment may be presented just during the grant hiring stage.
5. Signed declaration stating the infringement of the grant holder's duties (article 14, no. 4)
6. Documental evidence to support the country of residence, residence permit or other legally equivalent document, in cases where the applicant is a foreigner or non-resident in Portugal - valid until the beginning of the grant.
7. Other supporting documents relevant to the final assessment.

Failure to deliver the required documents within the 90-day period after the date of the notice of the conditional awarding of the grant implies its cancellation.

Application period: From 2024-07-11 to 2024-08-11

Submission of applications: the application will be formalised by submitting the form available in the *Work With Us* section of INESC TEC website.

7. BINDING LEGISLATION AND REGULATION

The hiring process shall comply with the current legislation regarding the Research Grant Holder Statute, approved by Law no. 40/2004 of August 18, in its current wording, as well as by the [Regulations for Grants of INESC TEC](#) and for [FCT Grants Regulation in force](#).

For more information, please check the [Regulations for Grants of INESC TEC](#) and relevant annexes at www.inesctec.pt/bolsas



Funded by the
European Union