



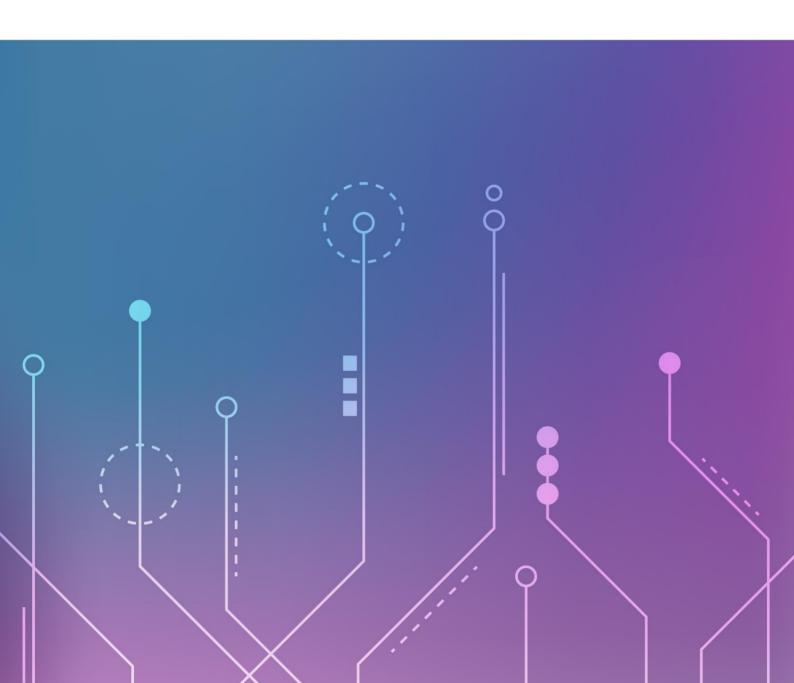
# Call for SR&TD Projects on Artificial Intelligence, Data Science and Cibersecurity of relevance to the Public Administration

**APPLICATION GUIDE** 

**JUNE 2024** 







## CALL FOR SR&DT PROJECTS: ARTIFICIAL INTELLIGENCE, DATA SCIENCE AND CYBERSECURITY OF RELEVANCE TO THE PUBLIC ADMINISTRATION

**APPLICATION GUIDE** 

This Application Guide is intended to support the PI throughout the application process to the Call for Scientific Research and Technological Development (SR&TD) Projects on Artificial Intelligence, Data Science and Cibersecurity of relevance to Public Administration 2024, and to help him/her preparing and submitting a successful application. This Guide draws on information available on the call page, namely the legal documents setting the rules and conditions for this Call: the Public Announcement for the Call ("Aviso para Apresentação de Candidaturas") and the FCT Projects Regulations in its current version, as well as under the terms of the contract signed between the Recover Portugal Mission Structure and the FCT beneficiary. On the FCT Call webpage for SR&TD Projects under the label Artificial Intelligence, Data Science and Cibersecurity of relevance to Public Administration 2024, the PI also finds the Guide for Peer Reviewers, the Ethics Self-Assessment Guide and the *Guião CIÊNCIAVITAE*. The period of applications submission for the current Call is from 24 June to 31 July 2024.



## 1. Call for SR&TD Projects on Artificial Intelligence, Data Science and Cibersecurity of relevance to Public Administration

The consolidation and strengthening of the National System of Science and Technology (NSST) constitute a priority of the national policy for science and technology. It aims at increasing the national and international competitiveness of science and technology as well as the ability to innovate and to promote bidirectional transfer of knowledge between SNCT and Public Administration entities.

Considering these goals, among others, FCT launches this call - Artificial Intelligence, Data Science and Cybersecurity of relevance to the Public Administration, to promote a greater approach between development strategies of different governmental powers and to lead to continuous improvement of services provided by different Public Administration entities, to optimize resources and combat fraud and error.

This will operationalise measure RE-C05-i08.M04 through support for research, development, testing and implementation activities of relevance to Public Administration entities, including local public administration (municipalities and intermunicipal entities), in the form of scientific research and technological development projects, in all phases, from exploratory activities to proofs of concept, covering the following thematic axes:

- I. Artificial intelligence and data science, including (but not limited to): analysing large volumes of data; predictive analytics, natural language processing, pattern analysis, machine learning;
- II. Interaction design and design of digital and physical systems, from an interdisciplinary and citizen-centred perspective;
- III. Cybersecurity, including (among others): prevention, detection, analysis and the ability to learn and respond to threats, risks and incidents that jeopardise the protection of infrastructures, data and people;
- IV. Artificial Intelligence Governance: research and study/planning activities, including legal aspects, with a view to establishing a future national structure or organisation dedicated to the implementation of artificial intelligence technologies in light of the "Al Act".

This call will be fully funded by the PRR in alignment with the objectives of Component 5 - "Investment and Innovation", within the scope of "RE-C05-i08 – More Digital Science", measure "RE-C05-i08.M04 – "a programme of R&I projects geared towards the development and implementation of advanced cybersecurity, artificial intelligence and data science systems in the Public Administration". Regarding local administration, we seek to promote projects aligned with the "National Strategy for Smart Territories", particularly those that impact smart governance and territorial sustainability.

Projects can combine the thematic axes described above.

For projects on the artificial intelligence field and data science and user interaction and interface systems, it is intended, in itself, that this initiative will result in concepts, algorithms, data analysis models and applications implemented in functional prototypes, which allow for their demonstration and experimental use by the Public Administration entities, including local public administration (municipalities and intermunicipal entities), for which they are intended to, as well as (when appropriate) by citizens and the general public .

In order to maximise the value of services, products and the reuse of generated data within the scope of this call, procedures aligned with the best international practices in open data and security, namely through the development of Data Management Plans for each project shall be adopted. It is also intended to adopt procedures aligned with the future EU Regulation on Artificial Intelligence ("Al Act").

Projects within cybersecurity domain, the aim is to achieve an impact on the capacity to respond to crises and on strengthening the resilience and preparedness of Public Administration entities, with a view to aligning with the future EU Regulation for cyber-resilience ("EU Cyber Resilience Act) and complying with national and European legislation (namely the NIS2 Directive) on cybersecurity.

The **beneficiary entities** can apply **individually** or in **co-promotion** and must be a legal entity belonging to the non-business entities of the R&D System, namely: higher education institutions, their institutes, and R&D units; state, international or associated laboratories with a head office in Portugal; non-profit private institutions whose main object is R&D activity, including Collaborative Laboratories (CoLab) and Centres for Technology and Innovation (CTI); other non-profit public and private institutions developing or participating in scientific research activities.

For this call, 8.375 million euros are available to fund research projects that must meet the following requirements:

- The maximum duration of the grant is 12 months.
- The maximum funding for project is 125.000,00 euros.

The support to be granted are non-refundable, applying the option of real costs.

The call is open from 24 June to 31 July 2024.

## 2. Prior to Submission

## 2.1 Who may submit an application

The Principal Investigator (PI) may be national, foreign, and stateless researchers who meet the following requirements by the deadline for submission of applications:

• Time committed to the project.



- Hold a doctoral degree at the closing date of the call. The document certifying the doctoral degree must be submitted at the time of the Acceptance Document.
- Have an employment contract or grant contract with the Principal Contractor. In the absence of such a link, at the time of the Acceptance Document a written agreement between the parties must be submitted, according to point c) of item 1 of Article 6 of FCT's Project Regulations.

For eligibility purposes, the following restrictions are also applied:

- A researcher may submit only one application as PI.
- The PI can only participate as a team member in one more application in this call
- The PI of the application cannot be:
  - PI with a final scientific report rejected within two years before the opening of the call, for reasons attributable to him/her.
  - o In a situation of unjustified non-fulfilment of the regulatory requirements regarding the presentation of reports on scientific execution of projects concluded and financed through FCT and in which he/she acted as PI.
- Applications that have been selected for funding by FCT or other funding agencies will not be accepted.
- Multiple applications for the same project will not be accepted:
  - o In the present call.
  - o In different calls for proposals that overlap in the period for receiving applications.
  - o In the case of applications to calls with different thematic scopes and which take place during different application periods, the recommendation for funding in one of them implies the exclusion from the decision process for the others.
- Related applications, from the same team, submitted to FCT or other funding agencies must be declared in the application.
- Applications must be submitted in English.
- Applicants providing false declarations or committing plagiarism in the application will be excluded from the Call.

## 2.2 Beneficiary Institution

The beneficiary entities that may apply, individually or in co-promotion, are:

#### Non-business entities of the R&I System, namely:

- Higher education institutions, their institutes and R&D units.
- State, international or associated Laboratories with head office in Portugal.
- Non-profit private institutions whose main objective is R&D activities, including Collaborative Laboratories (CoLab) and Centres for Technology and Innovation (CTI).
- Other non-profit private and public institutions developing or participating in scientific research activities.

#### Companies:

 Companies of any type and under any legal form if included in SR&TD projects led by non-entrepreneurial entities from the R&I system.

## 2.3 Registration

The application must be submitted using the <u>myFCT platform</u>. Should the candidate not be registered on the ClÊNCIA ID platform, he/she needs to generate a ClÊNCIA ID identifier at: <u>www.ciencia-id.pt</u>

The candidate should then use the CIÊNCIA ID login credentials to enter the <u>myFCT platform</u>. The CIÊNCIA ID platform also allows the candidate to complete his/her CIÊNCIAVITAE, which will also be included in the application. Please note that for Evaluation Panels to be able to consult the candidate's CIÊNCIAVITAE CV, it should be written entirely in English.

## 2.4 What should the candidate know before applying to this call

Before starting an application, make sure to be well informed on the rules governing this Call, by reading the <u>supporting documents</u>.

The terms of eligibility, as well as the rules and requirements of the different phases of the application process, are set forth in the following documents:

- FCT Projects Regulations in its current version, which establishes the general terms under which funding may be granted.
- Announcement for Call for Proposals ("Aviso de Abertura do Concurso") for SR&TD Projects, which specifies the conditions of this Call on Artificial Intelligence, Data Science and Cybersecurity of relevance to the Public Administration 2024.
- Guide for Peer Reviewers for the Call for SR&TD Projects Artificial Intelligence, Data Science and Cybersecurity of relevance to the Public Administration 2024, which establishes the terms for evaluation under which funding may be granted.

FCT also makes available the following Guides that must also be carefully analysed:

- The Ethics Self-Assessment Guide.
- The CIÊNCIAVITAE Guide.

## 2.5 General Recommendations to the candidates

- Prepare the application carefully and timely.
- Read carefully the instructions provided in this Guide and in the Application form.
- Learn about the structure of the Application form before beginning filling it in. Read all the sections of the Application form in advance, in order to have an idea of what is being asked and to have the necessary time to gather all the information required for submission.

- Make sure that all the institutions to be included in the application are available on the Application form. If they are not on the list, they have to be added through the Registration of Institutions form via the <a href="Portal de Ciência e Tecnologia">Portal de Ciência e Tecnologia</a> (available only in Portuguese). It can take up to two working days for a new institution to become available once the form is filled.
- Contact the researchers to be included in the application team in advance and ask them to register on the CIÊNCIA ID platform and to provide the applicant with the CIÊNCIA ID registration email address.
- Make sure an updated version of CIÊNCIAVITAE is available and ensure that the same goes for all members associated to the research team of the project.
- Make sure that each Institution selected in the application form has a team member associated.
- Prepare the budget of the application carefully and adequately.
- Ensure that the URL addresses of bibliographical references or other relevant material remain active throughout the decision-making process.
- Do not assume that the form and rules for submission of this application are the same as those used in other FCT programs or by other funding Agencies.
- Do not wait until the last minute to validate and make any corrections to the application. There is a myFCT validation process, to detect possible errors in your application, which can implicate corrections and the need for extra time. Please repeat this validation process regularly.
- Plan and complete the application process as early as possible. Only in this way FCT will be able to provide the best possible assistance.
- Visit the FCT website regularly for updated information regarding the Call.

## 2.6 Additional recommendations for writing a successful application

- Write the application in such a way as to convince the panel of experts that the ideas presented deserve to be funded.
- It is important to describe the institutions involved in the project and their respective skills and contribution to the development of the project.
- Remember that the application represents a commitment, not only from the Principal Investigator, but also from the entire research team.
- Be realistic in terms of expectations and, if the proposal is approved, make sure that the research team is able to carry it out as planned in the application.
- Read the Guide for Peer Reviewers carefully to understand how the application will be evaluated and make sure that the application addresses those crucial points.
- Avoid repeating the same text or entire paragraphs in different sections.

## 2.7 How to direct questions to FCT

Any clarifications from FCT can be requested via email. Use exclusively the email <u>concursoprojetos@fct.pt</u> for any queries concerning this Call, namely questions regarding the contents of the Application form and technical aspects of myFCT website.

Please note that FCT cannot guarantee that emails received during the last two working days of this Call's submission period will be answered.

## 3 Submission of the Application

The Application form is organized in eight sections. The sections are:

- General Data
- Institutions
- Research Team
- Work Plan
- Indicators
- Budget
- Statement of Commitment
- Validate and Submit

The detailed structure of the Application form, identifying all the fields and their respective character limits, is available in Appendix I. The following subsections of the guide provide a detailed description of each of the eight sections that comprise the application form and provide the most relevant information on how to fill in each field. Many of the fields on the form have a character limit.

We recommend the PI to click on **Validate and Submit** regularly when filling in the application so that any errors marked with the symbol  $\triangle$  can be detected and corrected in due time.

## 3.1 Guidelines for filling in the Application form

In the following chapters of this Guide, a detailed description of the contents requested in each section of the Application form is offered. Many of the fields in the form have a limited number of characters. Only plain text or attachments are allowed. Any other form of presenting additional information (such as links for Dropbox or Google Drive) will be disregarded for evaluation purposes.

Once the application is created on the <u>myFCT platform</u>, a reference code is automatically generated (in the format YEAR.NUMBER.CALLTYPE; e.g. 2024.0001.AICDC). This will be FCT's unique identification code for the application throughout the Call.

The various sections of the Application form can be accessed from the left-hand side menu bar.

#### 3.1.1 General Data

#### **PROJECT DESCRIPTION**

In this section of the form, the project is identified by filling in the following fields:

• **Title:** the title of the research project should be concise and succinct, understandable to a reader with a general scientific background, and suitable for public dissemination.

- Project acronym: assign an acronym for the identification of the project.
- **Keywords**: list a maximum of 4 keywords.

  The keywords are likely to be used in the peer-review process of the application and should
  - accurately reflect its scientific content. A repetition of the words contained in the title must be avoided.
- Thematic area: the thematic area must be chosen from among the 4 lines of research available in this field.
- **Justification of the thematic area**: briefly justify the choice of research thematic area selected for the application.
- Main scientific area (Scientific Domain / Scientific Area / Scientific Subarea): the scientific domain/areas and subareas should be chosen from the available options, starting with the main scientific domain.
- Timetable (start date and duration): indicate the expected start date of the project in day-month-year format. The project will have a maximum duration of 12 months.
   This indicative date may be changed for projects recommended for funding during the acceptance term signing phase; however, it cannot exceed 90 consecutive days from the date

#### 3.1.2 Institutions

of decision notification.

This section identifies the institutions involved in the project, both from an administrative and financial management perspective and in terms of scientific execution and it's divided in the following sections:

- Principal Contractor
- Participating Institutions
- Collaborative Institutions

Make sure that each Institution selected in the application form has a team member associated.

#### PRINCIPAL CONTRACTOR

The **Principal Contractor** is the **beneficiary entity** that leads the project and serves as the intermediary with the FCT on behalf of all partners. In approved projects, the Principal Contractor will receive all payments and then transfer the corresponding amounts to partner institutions.

The Principal Contractor must be based in national territory and must have a Tax Identification Number (NIPC), and the designation used to apply for call is the exact designation associated with that NIPC.

The Principal Contractor must be one of the beneficiaries' institutions describe in section 2.2.1.

The **Research Unit** field, associated with the Principal Contractor, are mandatory and allow the PI to identify which research units are involved in execution of the project. A maximum of 3 research units can be added to the principal contractor.

In this section a description of the Principal Contractor and its competencies for the development of the project may be provided. This information will be taken into account by the Evaluation Panel during the assessment of the adequacy of the host conditions (technical/scientific, organizational management and, when appropriate, co-funding capacity by companies) provided by the beneficiary entity.

#### PARTICIPATING INSTITUTIONS

Participating institutions must have a Tax Identification Number (NIPC) and an associated budget.

The Research Unit field, associated with the Participating Institutions, are mandatory and allow the PI to identify which research units are involved in execution of the project. A maximum of 3 research units can be added to the participating institutions.

#### COLLABORATIVE INSTITUTIONS

Collaborative Institutions are the institutions involved in the project, including foreign institutions, without an associated budget.

If any **beneficiary institution or research unit** is not **listed**, it will have to be added in the Institutions Pre-Registration form on the <u>Portal de Ciência e Tecnologia</u>. It may take up to two business days to update the list.

#### 3.1.3 Research Team

The research team consists of the PI and other team members directly involved in the project tasks and activities of the proposed project.

The PI must monitor the acceptance process of the team members and consultants by checking the following states, as well as providing their CVs:

- Invitation accepted
- Awaiting confirmation
- Invitation declined

Any team member or consultant that does not agree to participate in the project, should be removed by the PI from the form to allow the submission of the application.

Each researcher can only have one CIÊNCIAVITAE imported into myFCT in the same call. Therefore, if the researcher participates in several applications in the same call, once one of the applications is submitted, he/she will no longer be able to select the 'Get CIÊNCIAVITAE CV' button.

The Research Team item is divided into the following sections:

- Principal Investigator
- PI narrative CV
- Members
- Hirings
- Consultant
- Team CV synopsis

#### PRINCIPAL INVESTIGATOR

The PI's data (name, role, and Ciência ID) is automatically filled in. The PI must fill in the following information regarding his/her participation in the project:

- Institution to which the PI is associated.
- CIENCIAVITAE permissions and upload.

The PI's CV in the CIÊNCIAVITAE platform must be created/updated before associating it to the Application for this Call. It should be entirely in English.

Permission to FCT to access the PI's CIÊNCIAVITAE should be given before associating it with the application. By granting this permission, FCT will have access to the information subsets of the PI's CV with Public and Semi-public access levels. Subsets kept at a private access level will not be available for evaluation. Please check the CIÊNCIAVITAE Guide.

The button 'Give FCT permission' is visible in the CIÊNCIAVITAE menu. When this button is pressed, the system opens the CIÊNCIAVITAE platform. When the PI returns to the Application form, this button will be inactive.



Remember to give FCT the access to the contents of **each section** by selecting the privacy level to Public or Semi-public.

By selecting 'Get CIÊNCIAVITAE CV', the CV will be immediately associated with the Application form (in PDF format). When the process of importing the CV is finished, this file will be available on the Application form; a link will appear with the associated CV PDF file, indicating the date and time.



The PI should **check his/her CIÊNCIAVITAE CV PDF file** to confirm that all the information is correct. Any updates to the PI's CV will necessarily imply selecting 'Get CIÊNCIAVITAE CV' again. This means that updates to the CV content **must be made** through the CIÊNCIAVITAE platform; to have the updated CV associated to the application, it is mandatory to: i) remove the previous document and then ii) press again "Get CIÊNCIAVITAE CV'.

Please note that the content of the CIÊNCIAVITAE is exclusively the PI's responsibility.

The CIÊNCIAVITAE CV will be used by the reviewers **only to confirm** the information provided in the PI Narrative CV.

#### PI NARRATIVE CV

The PI Narrative CV aims at allowing a more effective and encompassing assessment of a diverse range of research achievements, focusing on the quality and impact of individual research outputs and researcher's contributions, while avoiding the use of metrics as a surrogate measure of quality. The narrative CV has the following sections:

- Career Profile: a summary of the PI's education (specifying the year the PhD was completed), key qualifications, and employment history. If applicable, any period of leave from research, such as parental leaves, long-term absence due to illness, period of work in industry, secondments, volunteering, or other non-research activities may be specified. Explain how these interruption(s) or the unconventional path and/or gap(s) has/have impacted your activity.
- Contributions to Science and Society: in the following sections, the PI may provide relevant examples of contributions in relation to his/her career stage and specific scientific area. Please note that the diverse sets of contributions provided below are designed to include different researcher's profiles and career stages across different scientific areas. The PI may use the guidelines below selecting the types of contributions that more broadly and effectively describe his/her researcher profile and curriculum.
  - i. Contributions to the generation of new ideas, tools, methodologies, or knowledge: description of how the PI has contributed to the generation of new ideas, tools, methodologies, or knowledge, and the relevance and impact of your contributions. These can include publications, key data sets, software, intellectual property (patents, licenses, trademarks, copyrights, novel assays, and reagents), conference presentations and proceedings, research, and policy publications, or other scientific, technological, cultural or artistic achievements. Awards received in recognition of contributions to the generation of knowledge may also be mentioned. To better inform the Evaluation Panel on the relevance of these contributions, when including 'what' those are, the PI must also consider 'how' or 'why' they are relevant or important, the role he/she played, and who and how has benefited from these outputs/achievements. Regarding publications, journal or publication metrics such as impact factors, and research performance metrics should be avoided<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Research performance metrics include, but are not limited to, h-index, H-index, i10-index, G-index, HG-index, Q2- index, AR-index, M-quotient, M-index, W-index, E-index, A-index.

- ii. Contributions to the development of individuals and/or research teams: highlight expertise provided by the PI which was relevant to the development of individuals and/or teams, including project participation, leadership or management, collaborative contributions, and team support. It can include teaching activities, workshops, or summer schools in which the PI was involved (for undergraduates, graduates, and post-grads, as well as junior colleagues), the supervision of students, mentoring or other contributions to the success of a team or advancement of colleagues. It can also include the PI's role (as a PI, team member or other) in past and ongoing funded projects, as well as the management of science, technology and innovation programs or projects. It can also be used to highlight the PI's involvement in collaborations/networks from an organizational to international level.
- iii. Contributions to the research community and the broader society: the PI may include activities he/she has participated in to progress the research community and engage with the broader society. These include contributions to research community outreach/engagement; editing, reviewing, refereeing, evaluation of funding applications; and organization of events that have benefited the research community, or improved research culture. These can also include societal engagement, knowledge transfer, dissemination of knowledge, outreach activities, and other type of engagement with the public, private, or non-profit sectors, and the broader society.
- iv. Selected outputs and/or activities: provide additional and detailed information on a maximum of five scientific outputs and/or activities that best describes the PI's research career and experience. For each one, the PI should indicate his/her role and how it has impacted the advancement of knowledge in the respective scientific area. Any type of contribution from the three previous sections can be also included. Whenever the outputs have a DOI, please include it.

#### **MEMBERS**

Team members must be associated with the application by entering their email address. For each team member, the PI must provide the following information:

- Email
- Institution to which the team member is associated in the scope of the research project

A maximum of up to 4 Core CVs can be presented: for the PI and 3 other team members (researchers considered as more relevant for the project). The PI is automatically considered a core CV. Each team member must confirm their participation in the application and associate their CIÊNCIAVITAE, in their myFCT area.

Please make sure that each Institution selected in the application form has a team member associated.

#### **HIRINGS**

In this section, additional human resources (contracts and scholarships) needed to carry out the project should be indicated. New hirings are provided in the application by filling in the following fields:

- Type
- Institution to which the hiring is associated in the scope of the research project

#### **CONSULTANT**

Internationally reputed experts in project's scientific areas who provide consulting services for the project should be identified. The following fields should be completed in the application:

- Email
- Framework of consultant's participation

Consultants should confirm their participation in the application and associate their ClÊNCIAVITAE or a PDF file with their CV (maximum 4 MB) in their myFCT area.

Whenever a team member or consultant is associated with the application, they will receive an email to confirm their association with the application.

#### TEAM CV SYNOPSIS

In this field, the PI must justify the framework and competencies of the research team and its coherence with the proposed work plan. The PI should focus on the team's scientific activity over the last 5 effective years, indicating the most relevant scientific achievements of the research team and demonstrating its competence in the area of the proposed project. This field will be taken into account by the panel when assessing the merit of the team and the adequacy of the profiles of its members to the work plan of the proposed project. Once again, the CIÊNCIAVITAE CV of each team member will be used by the reviewers only to confirm the information provided in this team CV synopsis.

#### 3.1.4 Work Plan

The following indications are **suggestions** on how to organize the description of the research plan. The structure is The PI's responsibility and should be adjusted according to the scientific discipline or inter-disciplinary nature. The research plan should be designed for a 12-month period, which is the maximum duration of the project.

The work plan is divided into the following sections:

- Abstract
- State of the art and Objectives
- Research plan and methods
- Bibliographic references
- Past publications
- Tasks
- Project timeline and management



- Ethical issues
- Other projects
- Attachments

#### **ABSTRACT**

In this section, the summary of the proposal should be presented, in **Portuguese** and **English**, with an analysis of the state of the art, the main goals to be addressed, the knowledge and skills available in the group, the strategy and methodologies to be used, identifying the novelty and the expected results.

The PI must indicate whether the abstract to be used by the FCT for **public disseminating** will be the same as the abstract previously filled in. If, for <u>confidentiality reasons</u>, the text of the abstract for publication purposes is different, the PI should click on the button **Abstract for publication different**. The content of this field will always be the PI's responsibility.

#### STATE OF ART AND OBJECTIVES

In this section, the PI must provide an overview of his/her research field, present the state of the art of the research area in connection with the ground-breaking nature of the proposed research project. References to the PI's previous work should be included. The PI should focus on the following questions:

- To what extent does the proposed research address important challenges?
- To what extent are the **objectives ambitious and beyond the state of the art** (e.g. novel concepts and approaches or development between or across disciplines)?

#### RESEARCH PLAN AND METHODS

In this section, the PI should describe the proposed research plan and the methodologies to be used, focusing on the following questions:

- To what extent is the outlined **scientific approach feasible** bearing in mind the ground-breaking potential of the proposed research in one of the four thematic areas of this call?
- To what extent are the proposed research methodology and working arrangements appropriate to achieve the goals of the project?
- To what extent are the proposed timelines, resources, and PI's commitment adequate and properly justified?

Funded projects will now have access to advanced computer resources and research data repositories provided by FCT without the need for further scientific evaluation. This includes computing time in FCT's two new supercomputers, Deucalion and MareNostrum 5. To this end, FCT kindly requests that applicants answer two simple yes/no additional questions:

Identify whether the work plan requires advanced computer resources to be provided by FCT.

 Identify whether the work plan requires space in a research data repository to be provided by the FCT.

#### **BIBLIOGRAPHIC REFERENCES**

This section is intended to include the references cited in the state of art and in the research plan and methods, with a cross-referencing methodology chosen by the PI, namely: APA, MLA or Chicago.

The following elements are considered for each reference: title; authors' names in the order in which they appear in the publication; name of the book or journal; editorial data, where applicable; volume number; page numbers; year of publication. If the publications are available electronically, you can add their URL, although this is not mandatory.

Bibliographical references are not limited to the PI and team members' publications.

#### PAST PUBLICATIONS

This section should include five publications (articles, books or monographs published or accepted for publication) authored or co-authored by the PI and the members of the research team and which are considered to be of relevant importance for assessing the scientific quality demonstrated for the project. You can choose between the following bibliographic citation styles: APA, MLA or Chicago.

To **change** the order of a publication in the table, click on it and drag it to the desired position.

It is recommended that the evaluators have easy access to these 5 publications. The URL addresses must be provided in full, and it is the PI's responsibility to keep these links active throughout the decision process.

#### **TASKS**

For each of the project tasks, you must indicate:

- Task denomination: must be concise and self-explanatory.
- Task description and expected results: in this section, you should explain the objectives in the
  context of the project, the methodologies and approaches proposed for their implementation,
  the results expected in the task and how these are preconditions for subsequent tasks, the link
  with other tasks, the role of each partner and institution in the task and the justification of the
  resources, human and material, needed to achieve the expected results of the task.
- Assigned the team member or team members associated with the task. All team members hired
  or to be hired, even without associated costs, must be allocated to at least one task.
- **Person\*month:** results from multiplying the person's percentage of dedication to the task by the duration of the task in months.

Examples:

- o 1 person at 50% for 6 months = 3 person\*month
- o 1 person at 30% for 6 months = 1,8 person\*month
- o 1 person at 50% for 15 days = 0.25 person\*month
- Start date and task duration (in months) must be included in the project's duration. To change the order of a task in the table, click on it is and drag it to the desired position.

The application must have tasks planned throughout its duration, i.e., there must be no period of the project without tasks.

#### PROJECT TIMELINE AND MANAGEMENT

In this section, the list of milestones, the timeline and the description of the management structure should be presented.

Milestones list: a milestone is a date by which a certain objective is expected to be achieved or
a phase is expected to be completed or a result obtained. The milestone description should
include what can be demonstrated or reported on that date. The number of milestones is limited
to 6. You should select the task(s) associated with the milestones.

The milestone dates must be marked on the timeline.

• **Timeline:** create a timeline description of your project in electronic format. We suggest to use as a starting point the following spreadsheet available in two formats: (MS Excel) and (ODF). Convert the final version to PDF format and upload it with the name <u>timeline.pdf.</u>

When filling in the timeline, the PI must indicate the following fields:

- o Partner responsible for task, the acronym of the institution responsible for the task.
- o Acronyms of partners involved in task, the acronyms of all the institutions involved in the task, including the institution responsible for the task.
- Management: in this section, the PI should include a description of the project management structure to be adopted, in particular the coordination between participants, the meetings planned and the reporting structure. The proposed structure will depend on the size of the project and, in particular, the existence of participants from different research units.

#### ETHICAL ISSUES

Please indicate whether there are any ethical issues identified in the project. If so, select the ethical statements considered to be the most appropriate and the reasons for the choice. The available options are described in the Ethics Self-Assessment Guide.

#### OTHER PROJECTS

Projects approved through peer review, led by the PI and started less than 5 years ago, completed or in progress should be listed. Additionally, please detail all projects, led by the PI, submitted and under peer-review evaluation.

In the case of a **FCT-funded project**, the PI should select the project and all the fields will be filled in automatically except for the field "Please list the main objectives of the project that you consider relevant for this application".

In the case of projects not funded by FCT, or projects submitted and currently under evaluation, the following elements must be filled in:

#### • Project identification data

- o Project reference (project reference, as set out in the contract granting the funding)
- o PI in the actual application
- Project status (in progress or completed; submitted projects should be classified as "in progress")
- o Project title
- o Principal Contactor

#### Funding

- Funding entity
- o Total Funding (requested funding, for projects under submission)

#### Timetable

- Start date (an estimative, for projects under submission)
- Duration (months)
- Relation with the current proposal: For funded projects, please detail a list of the results achieved, systems/prototypes, patents obtained from the results of the project and academic degrees obtained by students who participated in the project, among others. For submitted projects and under evaluation, please detail the relation to the current proposal. In both cases, the PI should also indicate how the project relates to the research team and the research goals associated with the present application.

#### **ATTACHMENTS**

In this field the PI must add the mandatory control list DNSH (Do No Significant Harm) document.

If necessary, additional documents corresponding to formulas, schemes, diagrams, graphics, images and support letters may be attached.

No other document types will be considered in this section.

This field is limited to 20 MB per application, and the authorized formats are PDF, JPEG and PNG.

#### 3.1.5Indicators

#### EXPECTED OUTPUT INDICATORS

The expected outputs give visibility to the research developed during the project. The outputs should be realistic and achievable and include publications, communications, reports, organization of seminars, advanced training and others. These indicators will be used to evaluate the adequacy of the final results to the results foreseen in the application.

#### DISSEMINATION

In the "Dissemination" field, a description of the plan for disseminating results and promoting knowledge and scientific dissemination, as well as the plan for disseminating knowledge transfer, should be included. Dissemination outputs should be included in the expected indicators and include actions for disseminating scientific culture, promoting and disseminating knowledge, technical/scientific publications, conferences, seminars, forums, and actions aimed at target sectors, or others.

#### **3.1.6 Budget**

The Budget section should be filled with the values and justification of budgetary needs, taking into account the funding limit and the basic eligibility criteria of no.9 established in the <a href="Public Announcement for the Call">Public Announcement for the Call</a>.

The amounts requested for the Human Resources are automatically filled in the budget table from the values entered in the Research Team section and the amounts for overheads, obtained by applying the flat rate of 25 per cent to direct eligible costs, are automatically calculated, and filled in in the budget table.

#### PRINCIPAL CONTRACTOR

In this section, the PI should fill in the requested funding for each budget category along with the corresponding justification.

#### PARTICIPATING INSTITUTIONS

The section on the budget of the participating institutions should be completed in a similar way to the previous section.

#### **FUNDING PLAN**

This section presents the project's Global Budget and Funding Plan tables that are automatically filled out.

### 3.1.7 Statement of Commitment

In this section the principal researcher must agree to the terms set out in the Statement of Commitment. Before agreeing, the PI must carefully read each point, which are:

- 1. Be aware with all the data and information within this application and to be fully responsible for its content and veracity.
- 2. Be acquainted with the provisions set out in Regulation No. 999/2016 from 31 October, in its current version, which outlines the access conditions and support rules to projects funded solely by national funds through Fundação para a Ciência e a Tecnologia, I.P. and the Announcement of the Call.
- 3. Not find himself/herself in a situation of unjustified non-compliance with regulatory requirements with regard to the presentation of reports on scientific execution of projects concluded in which I acted as Principal Investigator.
- 4. Commit himself/herself with the leadership of the project and responsibilities arising from its good execution.
- 5. Ensure open access to scientific publications (peer-reviewed) resulting from funding investment within the scope of the Announcement of the Call, in agreement with the Fundação para a Ciência e a Tecnologia, I.P Open Access Policy.
- 6. In case of present or future ethical issues related to the execution of the project, the PI commits to:
  - a) work closely with the beneficiary institutions of the project, and ensure that during the execution period they will have the necessary licenses to execute the project
  - b) obtain all necessary documentation and turn it available to FCT
  - c) fulfill and enforce compliance by the project's research team with the national and community legislation regarding this issue

To agree to terms established in the Statement of Commitment, the PI must check the box as shown in the image below:

🗹 I acknowledge and agree with the terms set out in this statement of commitment

#### 3.1.8 Validate and Submit

After completing the application, the PI should click on "Validate and Submit". If any errors are detected when filling out the application form, a list of the problems will be automatically provided, with a brief

description of the problem that led to the error and an indication of the section of the form where the correction must be made.

The presence of errors prevents the submission of the application.

After the close of the competition, the PI will no longer have access to the form, and it is only possible to access the global view of the submitted application (using Adobe Acrobat Reader).

## 4 After the Submission of the Application

#### 4.1 Statement of Commitment from the Principal Contractor

The Statement of Commitment of the Principal Contractor will be available on myFCT for the respective agreement by the **highest authority of the institution or someone delegated** by them after the deadline for submitting applications and until 5:00 PM, Lisbon time, xx of xx 2024, as predicted in the Public Announcement for the Call.

Agreement with the Statement of Commitment from the Principal Contractor is submitted in myFCT by using the ClÊNCIA ID credentials of the person(s) to whom the respective competence is delegated. The delegation of authorities is carried out on the <u>Portal de Ciência e Tecnologia</u> (PCT).

## 4.2 <u>Delegation of Access in the PCT</u>

The creation of the group of users and the delegation of competencies to these users to agree with the Statement of Commitment of the Principal Contractor are carried out in the PCT through the steps identified below. For further details, please refer to the Access Delegation Manual available on the PCT under the "Help"» "Support Documents" section.

- 1st step Log in with the credentials of the Institutional Collective User<sup>2</sup>.
- 2nd step Add users to the Administrators Group using their association keys.
- 3rd step Create the group of users who will confirm the Statement of Commitment of the applications and delegate the respective access. This step is carried out by one of the individual users of the Administrators Group:
  - a) To create the Group, you must access the "User Group" menu and enter the name you wish to assign to the group.
  - b) Access the created group and click on "Edit" to add users to the group, using their email or Ciência ID.

<sup>&</sup>lt;sup>2</sup> In case the institution does not have the credentials of the Collective User, they should be requested via email credenciais@fct.pt.

- c) In the "Access Permissions" menu, select the option "Project Call statement commitment".
- d) After accepting the "Terms and Conditions" (see image below), change the permissions to the option "Totals (inc. Locking)".



#### 4.3 Acceptance of Applications in myFCT

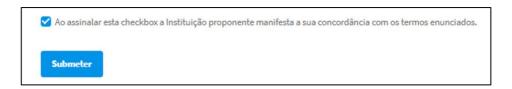
The agreement with the Statement of Commitment of the Principal Contractor is carried out on myFCT by the users to whom the respective competencies have been delegated, using their CIÊNCIA ID credentials.

The menu "Institutions" » "Ongoing Calls" allows access to the list of applications in which the institution participates in R&D Project calls, either as a principal contractor or as a participating institution.

Only the Principal Contractor must express agreement with the terms set in the Statement of Commitment on myFCT. The Principal Contractor must ensure that the other entities that make up the consortium of the proposed project also fulfill the obligations set out in the Statement of Commitment. For each application available on the list, the Principal Contractor has access to:

- Overview of the application (simplified version with public information only) by clicking on the application reference.
- Summary of the application / Statement of Commitment (only available when the institution participates as a principal contractor) by clicking on "Acceptance."

It is mandatory that the Principal Contractor agrees with the terms of the Declaration of Commitment. To this end, the Principal Contractor must check the box at the end of the Statement of Commitment of each application and click on "Submit":



After acceptance of the Statement of Commitment by the Principal Contractor, the following confirmation appears in the global view of the application, which will be available to both the Institutions and the Principal Investigator:

#### Instituição Proponente

Aceite por XXX em dd.mm.AAAA – hh:mm em nome de [Instituição] por delegação de competências dos responsáveis da instituição.



## Appendix I – Application Form Structure and Character Limit

Applications must be written in English and are submitted online via a dedicated FCT Web Platform (MyFCT).

Multiple applications of the same project are not allowed. New applications grounded on a previous project should contain substantial modification and update.

#### 1. GENERAL DATA

#### 1.1 Project description

- Principal investigator
- Title (PT/EN) (max. 255 characters)
- Project acronym (max. 15 characters)
- Keywords (PT/EN) (max. 4 keywords)
- Thematic area
- Justification of the thematic (max. 1000 characters)
- Main scientific area (Scientific Domain / Scientific Area / Scientific Subarea)
- Timetable (start date and duration)

#### 2. Institutions

#### 2.1 Principal contractor

- Institution
- Research unit maximum 3
- Institution description and its competencies for the development of the project (max. 1500 characters)

#### 2.2 Participating institutions

- Institution
- Research unit maximum 3
- Institution description and its competencies for the development of the project (max. 1500 characters)

#### 2.3 Collaborative Institutions

- Country
- Institution
- Institution description and its competencies for the development of the project (max. 1500 characters)

#### 3. RESEARCH TEAM

#### 3.1 Principal Investigator

- Institution to which you are associated in the scope of the research project
- CIENCIAVITAE permissions and upload
- Total cost (in euros) (if applicable)
- Employment relationship (if applicable)

#### 3.2 PI narrative CV

• Career profile (max. 2000 characters)

- Contributions to Science and Society:
  - Contributions to the generation of new ideas, tools, methodologies, or knowledge (max. 2000 characters)
  - Contributions to the development of individuals and/or research teams (max. 3000 characters)
  - Contributions to the research community and the broader society (max. 3000 characters)
  - Selected outputs and/or activities (max. 2500 characters)

#### 3.3 Members

- Email
- Role in the team
- Core CV
- Institution to which you are associated in the scope of the research project
- Total cost (in euros) (if applicable)
- Employment relationship (if applicable)

#### 3.4 Hirings

- Type
- Institution to which you are associated in the scope of the research project
- Total cost (in euros)

#### 3.5 Consultant

- Email
- Framework of consultant's participation (max. 1000 characters)

#### 3.6 Team CV synopsis

• Research team CV synopsis (max. 6000 characters)

#### 4. WORK PLAN

#### 4.1 Abstract

- Abstract in portuguese (max. 5000 characters)
- Abstract in English (max. 5000 characters)
- Abstract for publication different? (max. 5000 characters)

#### 4.2 State of the art and Objectives

• State of the art and objectives (max. 6000 characters)

#### 4.3 Research plan and methods

- Research plan and methods (max. 10000 characters)
- Identify whether the work plan requires advanced computer resources to be provided by FCT
- Identify whether the work plan requires space in a research data repository to be provided by the FCT

#### 4.4 Bibliographic references

Bibliographic references (max. 10000 characters)

#### 4.5 Past publications

- Order
- Publication (max. 600 characters)

URL

#### 4.6 Tasks

- Task denomination (max. 150 characters)
- Task description and expected results (max. 4000 characters)
- Assigned to
- Person\*month
- Start date
- Duration (months)
- Deliverables and delivery dates (max. 2500 characters)
- Budgets:
  - Overall cost justification of the task (max. 2500 characters)
  - Amount requested for the task

#### 4.7 Project timeline and management

- Milestones List (add Milestone)
  - Denomination
  - Milestone description (max. 300 characters)
  - Tasks
  - Date
- Timeline
- Management
  - Description of the management structure (max. 3000 characters)

#### 4.8 Ethical issues

- Are there Ethics Issues identified in this project?
- Select the ethical declarations you consider appropriate (if applicable)
- Justification (if applicable) (max. 3000 characters)

#### 4.9 Other projects

- Add project
  - Project reference
  - PI in actual application
  - Project status
  - Project title (in english)
  - Principal contractor
  - Funding
    - Funding entity
    - Total funding
  - Timetable
    - Start date
    - o Duration (months)
  - Relation with the current proposal
    - Please list the main objectives of the project that you consider relevant for this application (max. 2000 characters)

#### 4.10 Attachments

- Control List DNSH document mandatory submission
- Documents upload (if applicable)

#### 5. INDICATORS

- Expected output indicators
- Dissemination
  - Indicate the dissemination actions of the scientific activity planned in the project (max. 3000 characters)

#### 6. BUDGET

#### 6.1 Principal contractor

- Item
- Rationale for requested funding (max. 3000 characters)
- Year

#### 6.2 Participating institutions

- Item
- Rationale for requested funding (max. 3000 characters)
- Year

#### 6.3 Funding plan

- Global budget (automatic filling)
- Funding Plan (automatic filling)

#### 7. STATEMENT OF COMMITMENT

#### 8. VALIDATE AND SUBMIT

## Appendix II - Data Protection

In the context of the Research and Technological Development Projects Contest - on Artificial Intelligence, Data Science and Cibersecurity of relevance to Public Administration 2024, personal data is collected and processed in accordance with the General Data Protection Regulation (GDPR), approved by Regulation (EU) 2016/679 of the European Parliament and of the Council, of April 27th, 2016, on the protection of natural persons with regard to the processing of personal data and on the free movement of such data, in force since May 25th, 2018, and repealing Directive 95/46/EC of October 24th, 1995, and also in accordance with Law No. 58/2019, of August 8th, which ensures the implementation of the GDPR in the national legal order.

Personal data is collected exclusively for the purpose of Managing Programs and Financing Instruments. The processing of personal data for this purpose is lawful as it is necessary for compliance with a legal obligation and for the performance of a task carried out in the public interest by FCT, respectively under Article 6(1)(c) and (f) of the GDPR, embodied in points (a) and (c) of Article 3(2) of its Organic Law, approved by Decree-Law 55/2013, of April 17th, and in Regulation 5/2024, of January 3rd, which establishes the access conditions and support rules for projects funded exclusively by national funds through FCT.

Regarding the reviewers (independent and external experts, national or foreign, affiliated with national or foreign institutions), processing their personal data is lawful as it is necessary for the performance of a contract in which the data subjects are parties, or for pre-contractual measures at the request of the data subjects, in accordance with Article 6(1)(b) of the GDPR.

FCT may also process personal data for the purposes of public interest archiving, scientific or historical research, or statistical purposes, respecting the principle of data minimization, including anonymization or pseudonymization, whenever the intended purposes can be achieved through one of these means.

In the context of the Research and Technological Development Projects Contest - on Artificial Intelligence, Data Science and Cibersecurity of relevance to Public Administration 2024, personal data is collected:

- Directly from the data subjects who provide them through application forms and online platforms, specifically, the MyFCT Platform, where the entire application, evaluation, and funding approval process is submitted, in a single system, in the ClÊNCIA ID Platform, where the national identifier for access to various science services is located, in the ClÊNCIAVITAE Platform, where the curricula of all members associated with the research team are located, and in the Science and Technology Portal (PCT), where the data of the entities responsible for the applications are collected, and communication with FCT's counterparts (individual and collective) is carried out, aiming, through this unification, to significantly improve the efficiency of the procedural dynamics and also, in the specific case of evaluations, through the recruitment and appointment processes of the evaluators.
- b) Indirectly from the data subjects, through beneficiary entities that provide personal data related to the applications.

The personal data processed in the context of the Research and Technological Development Projects Contest - on Artificial Intelligence, Data Science and Cibersecurity of relevance to Public Administration 2024, relate in particular to the following:

#### a) Categories of data subjects:

Representatives of private non-profit institutions whose main purpose is R&D activities, including Collaborative Laboratories (CoLab) and Technology and Innovation Centers (CTI); Representatives of State Laboratories, Associated Laboratories, or international ones headquartered in Portugal; Representatives of other public and private non-profit institutions engaged in scientific research activities; Representatives of Companies of any nature and legal form, provided they are involved in R&D projects led by non-business entities in the R&D system; Representatives of foreign institutions, as partners in the projects; Representatives of participating institutions associated with IP; Representatives of collaborating institutions; Project responsible researchers; Co-responsible researchers of the project; Research team members; Coordinators; Reviewers (independent and external experts, national or foreign, affiliated with national or foreign institutions); Representatives of Higher Education Institutions, their institutes, and R&D units.

#### b) Categories of personal data:

#### Common:

- i. Civil identification: name, surname, date of birth, gender, civil identification number and/or passport, taxpayer identification number;
- ii. Contact: institutional email address, city, country or region of residence;
- iii. Academic and Professional Activity: professional situation, level of education, academic or professional career, academic degree, job titles, scientific identification; project identification;
- iv. Physical data: image on paper or video;



- v. Financial: IBAN;
- vi. Tracking: tools and protocols such as IP addresses (Internet Protocol), unique identifiers, security logs (access):
- vii. Authentication: Access credentials (username and password), user profiles;
- viii. Browsing data: IP address (Internet Protocol), session cookies, user cookies.

#### Special:

- ix. Historical of convictions: criminal and offenses, if applicable;
- x. Health: (contained in documents required to justify eligibility at the time of the project).

For the provision of services associated with the MyFCT, CIÊNCIA ID, CIÊNCIAVITAE, and PCT Platforms, different categories of personal data referring to different categories of data subjects may also be collected for different processing purposes, as defined by the Privacy Policies applicable to each platform.

In the context of compliance with legal obligations related to the purpose of Managing Programs and Financing Instruments, the collected personal data is disclosed to the Ministry of Science, Technology and Higher Education for the necessary acts of approval, to CES to ACM, I.P., for consultation regarding reviewers panels, for analysis of the final report of the funded project, and for disclosure of the results obtained on the respective portals, and also for the definition, execution, and evaluation of public policies, within the scope of their respective missions. Other entities not mentioned, but with legal legitimacy to request, collect, and process the data in question, are not excluded.

Personal data may also be subject to international transfer not only to countries belonging to the European Economic Area but also to third countries. In these cases, FCT transfers the data with adequate guarantees and always ensures data security, using the most appropriate international data transfer tools for this purpose. For the purpose of safeguarding the financial interests of the European Union, personal data will be transferred to the Mission Structure to Recover Portugal, as well as to other entities that are part of the governance model of the Recovery and Resilience Plan, to the European Commission, to auditing bodies, to the Court of Auditors, to the European Court of Auditors, and to the European Anti-Fraud Office (OLAF), as well as disclosed on Public Portal and on the More Transparency Portal.

The personal data will be transmitted and processed by the European Commission, for the purpose of evaluating the satisfactory compliance with milestones and targets as well as monitoring the legality and regularity of payments, in order to ensure adequate protection of the financial interests of the European Union, through the FENIX tool. Data subjects may consult the privacy policy, accessible at https://ec.europa.eu/economy\_finance/recovery-and-resilience-scoreboard/assets/RRF\_Privacy\_Statement.pdf.

Personal data collected by FCT under the IC&DT Projects Competition on Artificial Intelligence, Data Science and Cibersecurity of relevance to Public Administration 2024 may be processed to identify fraud risks, conflicts of interest, or irregularities, through the ARACHNE tool provided by the European Commission. Data subjects may consult the processing procedure and its purpose at https://ec.europa.eu/social/main.jsp?catId=325&intPageId=3587&langId=pt, as well as the Privacy Policy at: https://ec.europa.eu/social/BlobServlet?docId=25704&langId=en.

FCT assumes the role of data controller, headquartered at Avenida D. Carlos I, 126, 1249-074 Lisbon, telephone: +351 21 3924300, having appointed a Data Protection Officer, whose contact must be made directly to the email

## CALL FOR SR&DT PROJECTS: ARTIFICIAL INTELLIGENCE, DATA SCIENCE AND CYBERSECURITY OF RELEVANCE TO THE PUBLIC ADMINISTRATION

#### **APPLICATION GUIDE**

address dpo@fct.pt for all matters related to personal data processed for this purpose, further informing that personal data will be kept in accordance with what is established by legal or regulatory standards, or, in the absence of these, with what is deemed necessary for the purpose.

Through any of the contacts indicated above, and without prejudice to the limits provided by law, data subjects have the right to request from FCT access to personal data concerning them, their rectification or erasure, observance of the limitation of processing of their data, and portability of data when technically feasible. They may also object to processing or withdraw consent previously given, if applicable.

Without prejudice to direct notification to FCT, through the contacts available at https://www.fct.pt/contactos, data subjects may directly complain to the national supervisory authorithy, Comissão Nacional de Proteção de Dados using the contacts provided by this entity for this purpose at www.cnpd.pt.

The retention period for personal data is determined by legal or regulatory standards or, in the absence of these, by what is necessary for the pursuit of the purpose that motivated their collection and processing.

Personal data are stored in a way that allows the identification of data subjects only for the period necessary for the purpose for which they are processed, without prejudice, among others, to the fulfilment of legal obligations that impose a certain retention period or the exercise of FCT's legal rights and interests.

Personal data that are manifestly not relevant to the purpose of managing and developing digital infrastructures for science, technology, and research and development (R&D) activities are not retained and must be immediately and irreversibly anonymized and deleted.

To ensure the protection of processed personal data, FCT has implemented rigorous and internationally recognized rules, which apply to all individuals legally authorized to handle such personal data. To this end, FCT has adopted technical and organizational security measures to protect the personal data made available to it, as well as to ensure the confidentiality, integrity, and authenticity of the data processed, within the framework articulated with the duty of publishing the lists of approved and unapproved applications and lists of evaluator panels, which, by default, ensure that the data is locatable, accessible, interoperable, and reusable.

The personal data stored by FCT are encrypted and anonymized whenever possible, and access is controlled based on the principle of least privilege.

Furthermore, FCT continuously verifies information security standards to ensure not only continuous improvement but also to stay up to date with new threats, implementing necessary countermeasures.



