

CALL FOR R&D PROJECTS IN ALL SCIENTIFIC DOMAINS

Guide for Peer Reviewers

February 2022 version 2.0



Version	Status	Section	Page
V2	New	2. THE 2022 CALL FOR R&D PROJECTS	4
V2	Updated	4. SCORING SYSTEM (Table I)	7





TABLE OF CONTENTS

1.	ABOUT FCT	3
2.	THE 2022 CALL FOR R&D PROJECTS	3
3.	EVALUATION CRITERIA	4
3.1	Criterion A	4
3.2	Criterion B	5
3.3	Criterion C	6
4.	SCORING SYSTEM	
5.	EVALUATION PROCESS	8
5.1	Constitution of the Evaluation Panel	8
5.2	Evaluation stages	9
5.3	Evaluation timeline	
5.4	Feedback to be transmited to applicants	
6.	CONFIDENTIALITY AND CONFLICT OF INTEREST	
6.1	Confidentiality Statement	
6.2	Conflict of interest (CoI)	
7.	SCIENTIFIC DOMAINS, AREAS AND SUBAREAS AND EVALUATION PANELS	12
7.1	From Scientific Subareas to Evaluation Panels	
7.2	Scientific Subareas allocated to each Evaluation Panel	
7.2		
ANNE	X I - COMPONENTS OF THE APPLICATIONS	
Port	uguese to English Translation and explanations	





1. ABOUT FCT

FCT (Fundação para a Ciência e a Tecnologia) is the Portuguese public agency under the responsibility of the Ministry for Science, Technology and Higher Education that supports science, technology and innovation, in all scientific domains.

FCT's mission is to continuously promote the advancement of knowledge in science and technology in Portugal high international standards in quality and competitiveness, and encourage its dissemination and contribution to society and to economic growth.

FCT pursues its mission by funding, through competitive calls with peer review, fellowships, studentships and research contracts for scientists, research projects, research centres and infrastructures. FCT ensures Portugal's participation in international scientific organisations, fosters the participation of the scientific community in international projects and promotes knowledge transfer between Research and Development (R&D) centres and industry. Working closely with international organisations, FCT coordinates public policy for the Information and Knowledge Society in Portugal and ensures the development of national scientific computing resources.

The results of FCT accomplishments are, in essence, the outcome of the work carried out by individual scientists, research groups and institutions that are funded by FCT.

2. THE 2022 CALL FOR R&D PROJECTS

The **2022 Call for R&D projects in all scientific domains** is open from 8th February to 10th March 2022.

The aim of this call is to fund R&D projects in all scientific domains. The present call, ruled by the <u>FCT Projects</u> <u>Regulations</u>, entails a <u>public announcement</u> outlining the required features for applications, the budget allocation and the evaluation criteria to be applied. **All proposals** are submitted online via <u>MyFCT</u> Web Platform (more detailed information Annex I), written in English, and should contribute to at least one of the <u>17 Sustainable Development Goals</u> defined by the United Nations.

For this call **€75 million** of national state budget are available and **two types** of research projects can be funded:

- a) Scientific Research and Technological Development (SR&TD) Projects address scientifically relevant and original issues, with reference to international standards, contributing to the advancement of knowledge and producing identified outcomes, within the duration of the project.
- b) Exploratory Research Projects (PeX) are scientific or technological research projects that explore ideas or concepts with significant originality and/or innovative potential.

Project Type	Beneficiary Entities	Duration	Eligible Funding	Budget Allocation
SR&TD	Individually or in co- promotion	36 months (extendable for 12 months)	€250.000,00 max	€55 million
PeX	Individually (only one beneficiary)	18 months (extendable for 6 months)	€50.000,00 max	€20 million





The Principal Investigator (PI) is responsible for choosing the project type, as well as the most suitable scientific area and subarea of the proposed research plan. According to this selection, the eligible proposals will be evaluated by the correspondent international panel. The scientific areas, corresponding subareas and evaluation panels are listed in section 7. No application can be transposed to a different panel from the one that corresponds to the scientific area and subarea selected by the Principal Investigator.

The **beneficiary entities** must be a legal entity belonging to the non-business entities of the R&I System, namely: higher education institutions, their institutes and R&D units; state or international laboratories with a head office in Portugal; non-profit private institutions whose main object is R&D activity; other non-profit public and private institutions developing or participating in scientific research activities. The possible involvement of foreign institutions as participants in the project does not confer them the status of beneficiary.

Each applicant can only submit one application as PI or Co-PI. The PI, co-PI, core elements and the remaining elements of the research team, are responsible for submitting an updated version of their CV in English on the CIÊNCIAVITAE.

The information provided in the CVs will be used as a complement to the information provided in the application regarding the **PI Synopsis** and the **Research Team Synopsis**. The synopsis should focus on the **last 5 effective** years of scientific activity.

3. EVALUATION CRITERIA

The evaluation of the application will focus on the relevance and quality of following criteria:

- A. Scientific merit (A1) and innovative nature (A2) of the project from an international standpoint (40%);
- B. Scientific merit of the Principal Investigator (B1) and the research team (B2) (30%);
- C. Quality and feasibility of the workplan, the expected indicators and the budget reasonability (30%).

3.1 CRITERION A

This criterion aims to assess the scientific merit and innovative nature of the project from an international standpoint, through the following two subcriteria:

- A1 Scientific merit of the project (50%)
- A2 Innovative nature of the project (50%)





3.1.1 A1 - Scientific merit of the project

This subcriterion is intended to evaluate the scientific merit of the proposal, considering the following dimensions in an integrated way:

- Clear identification of the project objectives and scientific challenges addressed by the proposal;
- Research alignment and its compliance with the identified 2030 Agenda Goals;
- Potential contribution of the research project to the advancement of knowledge.

3.1.2 A2 - Innovative nature of the proposal

The present subcriterion is intended to assess the innovative nature of the proposal, considering the following aspects:

- Potential for breakthrough findings by comparison with the current state-of-the-art of the scientific area;
- Methodological innovation and replication potential;
- Potential impact of the project's outcomes on the economic, technological and societal dimensions;
- Capacity to lead to interdisciplinary contributions.

3.2 CRITERION B

The present criterion aims to evaluate the scientific merit of the PI and the research team, through the following subcriteria:

- B1 Scientific merit of the Principal Investigator (50%)
- B2 Scientific merit of the research team (50%)

3.2.1 <u>B1 - Scientific merit of the Principal Investigator</u>

This subcriterion is intended to evaluate scientific merit of the PI, considering the CV synopsis among others, through the following dimensions:

- Merit of the scientific and professional career of the Principal Investigator valuing the different components: participation in research projects; scientific publications; leadership/organization/participation in networks and conferences; participation in activities of scientific training and management; outreach activities;
- Pl's qualifications regarding the project's challenges, both at the scientific and management level, as well as the ability to engage young researchers in training;
- Relevant outcomes of previous projects and their contribution to the advancement of knowledge and to knowledge-based applications, assessed through the qualitative appraisal of publications or other professional and scientific works and actions considered as the most representative of the of the PI's career.





3.2.2 B2 - Scientific merit of the research team

The present subcriterion is intended to assess the scientific merit of the research team, considering the research team CV synopsis among others, through the following dimensions:

- Scientific productivity of the team (references to publications and citations in published works, other relevant indicators);
- Ability to engage young researchers in training;
- Degree of internationalisation of the team (when appropriate);
- Abilities and skills to adequately execute the proposed project in its specific area, considering the team's configuration, the availability and commitment of its members (and other entities, when applicable);
- Level of commitment of any companies participating in the project (if applicable).

3.3 CRITERION C

This criterion is intended to evaluate the quality and feasibility of the workplan and the expected indicators, as well as the budget adequacy, considering the following aspects:

- Quality (clarity, consistency and adequacy) of the project, taking into consideration the theoretical framework, the research methodology and the work plan;
- Clear identification of the planned activities, their structure and adequacy to the established methods and objectives;
- Adequacy of the human resources and methodologies to perform the proposed objectives and tasks and meet the proposed deadlines;
- If applicable, analysis of the risks associated to the different stages of the project, with special focus on the identification of the critical points and the corresponding contingency plan;
- Valuation of the potential of the predicted outputs (besides other components of the proposal, more detailed information can be found in the application form section 6 "Expected output indicators" and "Knowledge dissemination");
- Adequacy of the physical and financial resources involved in the project, with regard to the host's conditions (technical/scientific, organizational management and, when appropriate, co-funding capacity by companies) provided by the beneficiary entities, in particular institutional resources of the participating entities, namely of the Principal Contractor;
- Adequacy and consistency of the proposed budget to accomplish the objectives and activities proposed.





4. SCORING SYSTEM

The scoring system uses a **9-point scale, using 0.1 increments**. The maximum score is 9 and the minimum is 1, as presented in Table I.

Evaluation	Score	Strengths & Weaknesses	
Excellent	9	Exceptionally strong with no weaknesses	
Vonussad	8	Very strong with some negligible weaknesses	
Very good	7	Strong with some minor weaknesses	
Cood	6	Some strengths with numerous minor weaknesses	
Good	5	Some strengths but with at least one moderate weakness	
4 Few strengths with several minor weaknesses		Few strengths with several minor weaknesses	
Adequate 3 Few strengths and major weaknesses		Few strengths and major weaknesses	
Deer	2	Very few strengths and serious weaknesses	
Poor	1	Cannot be assessed due to missing or incomplete information	

Table I – Qualitative descriptors associated to the 9-point scale.

The Merit of the Project (MP) is given by:

MP = 0.40 A (0.50 A1 + 0.50 A2) + 0.30 B (0.50 B1 + 0.50 B2) + 0.30 C

The subcriteria A1, A2, B1 and B2 and criterion C are scored using a 9-point scale system (1 – minimum; 9 – maximum) with decimal numbers. The final score of MP is rounded to two-decimal places.

For a proposal to be eligible for funding, the following **minimum score** is required:

• MP ≥ 7.00 points.

The eligible applications will be ranked by the evaluation panel, according with the type and by decreasing order of the MP score.

In case of ties (projects with the same MP score), the ratings assigned to criteria A2, B1, A1, B2 and C will be used sequentially and by decreasing order to provide the final ranking of the projects.

For each project type, the total budget allocation to the call will be distributed for each evaluation panel proportionally based on the total amount of the solicited funding of the eligible proposals (MP \ge 7.00) in each panel.

A PI whose application is scored with a MP lower than 5.00 will be hindered to apply as PI in the next edition of the Call for SR&TD Projects in all scientific domains.





5. EVALUATION PROCESS

5.1 CONSTITUTION OF THE EVALUATION PANEL

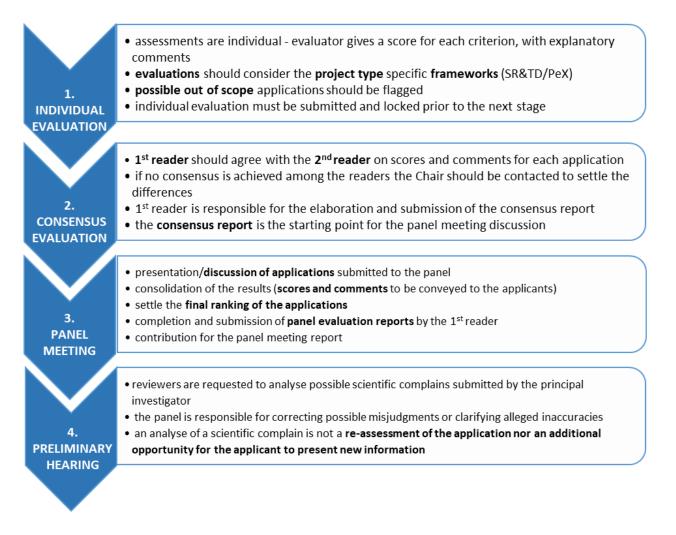
- The evaluation panels are constituted by international reviewers, taking into consideration the number and the scientific areas of the applications, an adequate gender balance and a fair geographic and institutional distribution of evaluators;
- All experts will be of acknowledged competence in the scientific areas of the application to be evaluated, and cannot be affiliated with Portuguese R&D institutions or have current or scheduled collaborations with any Portuguese R&D institution;
- For each panel a **Chair** will be designated and **is responsible for the following tasks:**
 - Assist FCT with the constitution of the panel by suggesting possible reviewers to be invited;
 - Depending on the panel's dimension and spectrum of subareas, the panel Chair may indicate a Co-Chair;
 - Assign each application to two panel members (1st and 2nd readers), taking into consideration any declared **Conflict of Interest (Col)**, as well as the **matching of scientific expertise** within the topic of the application;
 - Keep the evaluation process within the defined timeframe and contact panel members in case of any delays;
 - Support the FCT team in the resolution of any Col identified during the evaluation process;
 - Suggest external reviewers to provide an assessment of an application, whenever a specific expertise is not covered by the panel;
 - Participate in a videoconference meeting with one or more members of the Board of Directors of FCT, prior to the beginning of the reviewing period, to comply with the steps of the evaluation procedure;
 - Assure the quality of the reports: comments should be in agreement with the scores taking into account descriptors of the scoring system (see section 4), providing substantive arguments and identifying strengths and weaknesses for each evaluation criterion;
 - Moderate the panel meeting;
 - Prepare the panel meeting report that should address work methodology, conflicts of interest and final ranking by type;
 - Coordinate the support to be given to FCT and panel members during the period of preliminary hearings, if necessary.





5.2 EVALUATION STAGES

The evaluation process comprises 4 stages:



5.3 EVALUATION TIMELINE

The evaluation timeline is established by FCT's Board of Directors and conveyed to the evaluation panel Chair and members. The date of the final videoconference meeting of the evaluation panel is established in advance by FCT.





5.4 FEEDBACK TO BE TRANSMITTED TO APPLICANTS

All the reviewers should comply with the following additional guidelines in the elaboration of the evaluation reports and includes:

- The score and comments for each of the evaluation criteria, including strengths and weakness;
- Identification of the research plan's alignment with the framework of any of the 2030 UN Agenda Goals;
- A comment on the proposed budget; suggested changes in the budget must be justified;
- A comment concerning ethical issues, if applicable;
- Confidential comments to the evaluation panel and /or FCT, if necessary.

Comments must:

- Be **coherent** with the **scores** taking into account the **descriptors** presented in Table I (section 4);
- Be clear and consistent, highlighting the strengths and weaknesses of the application for each criterion;
- Take into account the research project type (SR&DT or PeX);
- Use dispassionate and analytical language, avoiding dismissive statements about the applicant, the proposed science, or the scientific field;
- Be impeccably polite;
- Address the submitted work plan and not the work the reviewers consider should have been proposed.

The quality of the comments to be transmitted to the applicants is of paramount importance and part of the evaluation process, therefore being a crucial task of the evaluation panel.

Comments must not:

- Give a description or a summary of the application;
- use of the first person or equivalent: "I think..." or "This reviewer finds..."; alternatively, panel members are advised to use expressions such as "The panel considers..." or "It is considered...";
- Ask questions, as the applicant will not be able to answer them;
- Provide recommendations or advices for improving the application;
- Have contradicting statements;
- Mention quantitative details that can easily originate factual mistakes.





6. CONFIDENTIALITY AND CONFLICT OF INTEREST

6.1 CONFIDENTIALITY STATEMENT

The confidentiality of written applications must be protected. All reviewers involved in the evaluation are asked not to copy, quote or otherwise use material contained in the applications. All reviewers are requested to accept a statement of confidentiality relative to the contents of the project applications and to the results of the evaluation.

6.2 CONFLICT OF INTEREST (COI)

Disqualifying Conflict of Interest

In the present Call

Researchers are hindered to participate as Chair, Co-Chair, Panel member or External reviewer if they:

- 1. Have submitted any application as PI or co-PI;
- 2. Have first-degree relationships, domestic partnership or are married with a **PI or co-PI**.

In a specific Panel

Researchers are hindered to participate as Chair, Co-Chair, Panel member or External reviewer in a panel in which they:

- 1. Have submitted an application as team member or consultant;
- 2. Have first-degree relationships, domestic partnership or are married with a team member or consultant of an application.

With an application

Panel members cannot evaluate nor participate in the panel meeting discussion of an application in the following circumstances:

- 1. Personal or financial interest in the application's success;
- 2. Current or planned close scientific cooperation;
- 3. Research cooperation within the last three years before the opening date of the call, *e.g.* joint publications;
- 4. Dependent employment relationship or supervisory relationship (*e.g.* teacher-student relationship up to and including the postdoctoral phase) within the three years before the opening date of the call;
- 5. Affiliation or pending transfer to any of the departments, research centres or companies involved in the project;
- 6. Researchers who are active in a council or similar supervisory or advisory board of the applying institutions are excluded from participating in the review and decision-making process for applications originating from these institutions.





Potential Conflict of Interest

The panel member should notify FCT and clarify if he/she is able to perform an unbiased evaluation or if the conflict should rather be considered as disqualifying. A potential conflict of interest exists in the following circumstances:

- 7. Relationships other than first-degree, marriage or domestic partnership; other personal ties or conflicts;
- 8. Participation in university bodies other than those listed under no. 6, *e.g.* in scientific advisory committees in the research environment;
- 9. Preparation of an application or implementation of a project with a closely related research topic (competition);
- 10. Participating in an on-going scientific or inter-personal conflict with the applicant(s).

In case a conflict of interest is detected during the evaluation process, the individual reviewer is required to inform the panel Chair and FCT team of this situation, so that the application may be reassigned. Depending on its nature, this information will be presented in the panel meeting report.

7. SCIENTIFIC DOMAINS, AREAS AND SUBAREAS AND EVALUATION PANELS

This section lists the Scientific Domains, Areas and Subareas, according to <u>OECD's revised Field of Science and</u> <u>Technology – FOS</u>, and the corresponding Evaluation Panels. Each evaluation panel is in charge of the applications from a set of scientific subareas, as indicated below:

7.1 FROM SCIENTIFIC SUBAREAS TO EVALUATION PANELS

Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel
		Pure Mathematics	
	Mathematics	Applied Mathematics	Mathematics
	Mathematics	Statistics and Probability	Mathematics
		Other Subareas of Mathematics	
		Computer Sciences	
	Computer and Information Sciences	Information Sciences	Computer and Information Sciences and
ş		Bioinformatics	Informatics
suce		Informatics	
Exact Sciences	Physical Sciences	Atomic, Molecular and Chemical Physics	
act		Condensed Matter Physics	
Ê		Particles Physics	
		Nuclear Physics	
		Fluids and Plasma Physics	Physics
		Optics	
		Acoustics	
		Astronomy	
		Other Subareas of Physical Sciences	





Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel
		Organic Chemistry	
		Inorganic Chemistry	
Ś		Physical Chemistry	
suce		Polymer Science	
Exact Sciences	Chemical Sciences	Electrochemistry	Chemistry
ract		Colloid Chemistry	
Ê		Analytical Chemistry	
		Nuclear Chemistry	
		Other Subareas of Chemical Sciences	
		Geosciences, Multidisciplinary	
		Mineralogy	
		Paleontology	
		Geochemistry	
s		Physical Geography	
ence		Geology	Earth Sciences and Engineering
Scie	Earth and Related	Volcanology	
Natural Sciences	Environmental Sciences	Meteorology and Atmospheric Sciences	
Nat		Climatic Research	
		Oceanography, Hydrology and Water Resources	-
		Geophysics	
		Environmental Sciences	Environmental Sciences





Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel
		Cell Biology	
		Biochemistry	
		Biochemical Research Methods	
		Microbiology	
		Molecular Biology	Experimental Biology and Biochemistry
		Biophysics	
		Genetics and Heredity	
	Biological Sciences	Reproductive Biology	
S		Developmental Biology	
ence		Plant Sciences and Botany	
Scie		Zoology, Ornithology, Entomology	
Natural Sciences		Marine Biology, Freshwater Biology and Limnology	
z		Ecology	-
		Biodiversity Conservation	Biological Sciences
		Biology	
		Evolutionary Biology	
		Other Biological Topics	
		Behavioral Sciences Biology	
		Mycology	
		Virology	Clinical Medicine, Immunology and Infection





Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel
		Civil Engineering	_
		Architecture Engineering	
	Civil Engineering	Construction Engineering	Civil Engineering
		Transport Engineering	
		Municipal and Structural Engineering	
		Electrical and Electronic Engineering	
	Electrical Engineering,	Robotics	
	Electronic Engineering,	Automation and Control Systems	Flootrical and Flootrania Engineering
	Information	Communication Engineering and Systems	Electrical and Electronic Engineering
	Engineering	Telecommunications	
		Computer Hardware and Architecture	
log		Mechanical Engineering	
Engineering and Technology	Mechanical	Applied Mechanics	
Tec		Thermodynamics	
and		Aerospace Engineering	Mechanical Engineering and Engineerir
ing	Engineering	Nuclear Engineering	Systems
leer		Audio Engineering and Reliability Analysis	
ngir		Engineering Systems	
ш		Renewable Energies	
	Chamical Engineering	Chemical Engineering	Chemical Engineering
	Chemical Engineering	Chemical Process Engineering	Chemical Engineering
		Materials Engineering	
		Ceramics	
	Matarials Engineering	Coating and Films	Matarials Engineering
	Materials Engineering	Composites	Materials Engineering
		Paper and Wood	
		Textiles	
	Madical Engineering	Medical Engineering	Disconging and Distastical and
	Medical Engineering	Medical Laboratory Technology	Bioengineering and Biotechnology





Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel
		Environmental Engineering	Environmental Biotechnology and Engineering
		Geotechnics	
		Petroleum Engineering, Energy and Fuels	
	Environmental	Remote Sensing	Earth Sciences and Engineering
	Engineering	Mining and Mineral Processing	
		Geological Engineering	
		Marine Engineering	
		Sea Vessels	Mechanical Engineering and Engineering Systems
		Ocean Engineering	Systems
logy	Environmental Biotechnology	Environmental Biotechnology	
Engineering and Technology		Bioremediation, Diagnostic Biotechnologies (DNA Chips and Biosensing Devices) in Environmental Management	Environmental Biotechnology and Engineering
ering a		Environmental Biotechnology related Ethics	
gine	Industrial Biotechnology	Industrial Biotechnology	
En		Bioprocessing Technologies, Biocatalysis and Fermentation	Disongingering and Distachuslery
		Bioproducts, Biomaterials, Bioplastics, Biofuels, Bio-derived Bulk and Fine Chemicals and Bio-derived Novel Materials	Bioengineering and Biotechnology
		Nanomaterials	
	Nanatachacles	Nanoprocesses	Nanatashnalagu
	Nanotechnology	Nano-Optics and Nanophotonics	Nanotechnology
		Modelling at Nanoscale	
	Other Engineering and Technologies	Food and Beverages	Animal and Veterinary Sciences and Agro-Food Biotechnology





Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel
		Immunology	Clinical Medicine, Immunology and Infection
		Neurosciences	Neurosciences
		Medicinal Chemistry	Chemistry
		Pharmacology and Pharmacy	
	Basic Medicine	Anatomy and Morphology	
		Human Genetics	
		Toxicology	
		Physiology	Basic Medicine
		Pathology	
		Oncobiology	
		Other Subareas of Basic Medicine	
		Andrology	
ses		Obstetrics and Gynecology	
ienc		Pediatrics	
h Sc		Cardiac and Cardiovascular Systems	
ealtl		Peripheral Vascular Disease	
Нр		Hematology	
ll an		Respiratory Systems	
Medical and Health Sciences		Critical Care Medicine and Emergency Medicine	-
-		Anaesthesiology	
		Orthopaedics	
		Surgery	 Clinical Medicine, Immunology and
	Clinical Medicine	Radiology, Nuclear Medicine and Medical Imaging	Infection
		Transplantation	
		Dentistry, Oral Surgery and Medicine	
		Dermatology and Venereal Diseases	
		Allergy	-
		Rheumatology	
		Endocrinology and Metabolism	
		Gastroenterology and Hepatology	-
		Urology and Nephrology	
		Oncology	
		Ophthalmology	





Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel
		Otorhinolaryngology	
		Psychiatry	
		Clinical Neurology	
	Clinical Medicine	Geriatrics and Gerontology	Clinical Medicine, Immunology and
		General and Internal Medicine	metion
		Other Clinical Medicine Subjects	
		Integrative and Complementary Medicine	-
		Health Care Sciences and Services	
		Health Policy and Services	-
		Nursing	-
		Nutrition, Dietetics	-
es		Public and Environmental Health	-
enc	Health Sciences	Epidemiology	Health and Sport Sciences
Medical and Health Sciences		Occupational Health	-
alth		Sport and Fitness Sciences	-
A He		Social Biomedical Sciences	-
and		Medical Ethics	-
dical		Substance Abuse	-
Med		Tropical Medicine	
		Parasitology	Clinical Medicine, Immunology and
		Infectious Diseases	metion
		Health-related Biotechnology	
		Technologies - Manipulation of Cells, Tissues, Organs or the Whole Organisms	-
	Medical Biotechnology	Technologies - Identification of the Functioning of DNA, Proteins and Enzymes and its relation with the Disease	Bioengineering and Biotechnology
		Biomaterials	
		Medical Biotechnology related Ethics	
	Other Medical Sciences	Forensic Science	Clinical Medicine, Immunology and Infection





Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel
		Agriculture	
		Forestry	
	Agriculture Forestry	Fishery	
	Agriculture, Forestry and Fisheries	Soil Science	Agriculture, Forestry and Fisheries
		Horticulture and Viticulture	
		Agronomy, Plant Breeding and Plant Protection	
		Animal and Dairy Science	
JCes	Animal and Dairy Science	Husbandry	
Scier		Pets	
tural	Veterinary Science	Veterinary Science	
Agricultural Sciences		Agricultural Biotechnology and Food Biotechnology	Animal and Veterinary Sciences and
		GM Technology (Crops and Livestock) and Livestock Cloning	Agro-Food Biotechnology
	Agricultural	Marker Assisted Selection	
	Biotechnology	Diagnostics	
		Biomass Feedstock Production Technologies, Biopharming	
		Agricultural Biotechnology related Ethics	-





Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel	
	Psychology	Psychology (including Human-Machine relations)		
		Psychology, Special (including Therapy for Learning, Speech, Hearing, Visual and other Physical and Mental Disabilities)	Psychology	
	Economics and Business	Economics, Econometrics	Economics and Business	
		Industrial Relations		
	Dusiness	Business and Management		
	Educational Sciences	Education, General (including Training, Pedagogy, Didactics)	Educational Sciences	
	Educational sciences	Education, Special (to Gifted Persons, those with Learning Disabilities)	Educational Sciences	
		Sociology		
		Demography		
	Sociology	Anthropology	Sociology	
	Sociology	Ethnology	Sociology	
Social Sciences		Social topics (Women's and Gender Studies; Social Issues; Family Studies, Social Work)		
Scie	Law	Law, Criminology, Penology		
ocial		Other Subareas of Law		
Sc	Political Science	Political Science	Law and Political Science	
		Public Administration		
		Organisation Theory		
	Social and Economic Geography	Environmental Sciences (Social Aspects)		
		Cultural and Economic Geography		
		Urban Studies (Planning and Development)		
		Transport Planning and Social Aspects of Transport	Social and Economic Geography	
		Other Subareas of Social and Economic Geography		
		Journalism		
		Information Science (Social Aspects)		
	Media and	Library Science		
	Communications	Media and Socio-Cultural Communication		
		Other Subareas of Media and Communications		





Scientific Domain	Scientific Area	Scientific Subarea	Evaluation Panel	
	History and Archaeology	History Archaeology	History and Archaeology	
	Languages and Literature	General Language Studies Specific Languages		
		General Literature Studies Literary Theory		
		Specific Literatures Linguistics	Languages and Literature	
		Other Subareas of Languages and Literature		
lities	Philosophy, Ethics and Religion	Philosophy Ethics	Philosophy	
Humanities		Theology Religious Studies		
		History and Philosophy of Science and Technology		
	Arts	Arts Design and Architecture	Arts	
		Performing Arts Studies (Musicology, Theater Science, Dramaturgy)		
		Folklore Studies		
		Studies on Film, Radio and Television		
		Art History Other Subareas of Arts		





7.2 SCIENTIFIC SUBAREAS ALLOCATED TO EACH EVALUATION PANEL

Evaluation Panel	Scientific Area	Scientific Subarea
		Pure Mathematics
Mathematics	Mathematics	Applied Mathematics
Mathematics		Statistics and Probability
		Other Subareas of Mathematics
	Computer and Information	Computer Sciences
Computer and Information		Information Sciences
Sciences and Informatics	Sciences	Bioinformatics
		Informatics
		Atomic, Molecular and Chemical Physics
		Condensed Matter Physics
		Particles Physics
		Nuclear Physics
Physics	Physical Sciences	Fluids and Plasma Physics
		Optics
		Acoustics
		Astronomy
		Other Subareas of Physical Sciences
	Chemical Sciences	Organic Chemistry
		Inorganic Chemistry
		Physical Chemistry
		Polymer Science
		Electrochemistry
Chemistry		Colloid Chemistry
		Analytical Chemistry
		Nuclear Chemistry
		Other Subareas of Chemical Sciences
	Basic Medicine	Medicinal Chemistry
	Civil Engineering	Civil Engineering
		Architecture Engineering
Civil Engineering		Construction Engineering
		Transport Engineering
		Municipal and Structural Engineering





Evaluation Panel	Scientific Area	Scientific Subarea
		Electrical and Electronic Engineering
	Floatsian Franksonian	Robotics
Electrical and Electronic	Electrical Engineering, Electronic Engineering,	Automation and Control Systems
Engineering	Information Engineering	Communication Engineering and Systems
		Telecommunications
		Computer Hardware and Architecture
		Mechanical Engineering
		Applied Mechanics
	Mechanical Engineering	Thermodynamics
		Aerospace Engineering
		Nuclear Engineering
Mechanical Engineering and		Audio Engineering and Reliability Analysis
Engineering Systems		Engineering Systems
		Renewable Energies
		Marine Engineering
		Sea Vessels
		Ocean Engineering
Chaminal English and a	Chemical Engineering	Chemical Engineering
Chemical Engineering		Chemical Process Engineering
		Materials Engineering
		Ceramics
		Coating and Films
Materials Engineering	Materials Engineering	Composites
		Paper and Wood
		Textiles





Evaluation Panel	Scientific Area	Scientific Subarea
	Medical Engineering	Medical Engineering
		Medical Laboratory Technology
		Industrial Biotechnology
	Industrial Biotechnology	Bioprocessing Technologies, Biocatalysis and Fermentation
Bioengineering and		Bioproducts, Biomaterials, Bioplastics, Biofuels, Bio- derived Bulk and Fine Chemicals and Bio-derived Novel Materials
Biotechnology		Health-related Biotechnology
		Technologies - Manipulation of Cells, Tissues, Organs or the Whole Organisms
	Medical Biotechnology	Technologies - Identification of the Functioning of DNA, Proteins and Enzymes and its relation with the Disease
		Biomaterials
		Medical Biotechnology related Ethics
		Nanomaterials
Nanotechnology	Nanatashnalagu	Nanoprocesses
Nanotechnology	Nanotechnology	Nano-Optics and Nanophotonics
		Modelling at Nanoscale
		Geological Engineering
		Geotechnics
	Environmental Engineering	Petroleum Engineering, Energy and Fuels
		Remote Sensing
		Mining and Mineral Processing
		Geosciences, Multidisciplinary
		Mineralogy
Earth Sciences and Engineering		Paleontology
		Geochemistry
	Forth and Deleted	Physical Geography
	Earth and Related Environmental Sciences	Geology
		Volcanology
		Meteorology and Atmospheric Sciences
		Climatic Research
		Oceanography, Hydrology and Water Resources
		Geophysics





Evaluation Panel	Scientific Area	Scientific Subarea
Environmental Sciences	Earth and Related Environmental Sciences	Environmental Sciences
	Environmental Engineering	Environmental Engineering
Environmental Biotechnology and Engineering	Environmental Biotechnology	Environmental Biotechnology Bioremediation, Diagnostic Biotechnologies (DNA Chips and Biosensing Devices) in Environmental Management Environmental Biotechnology related Ethics
	Biological Sciences	Plant Sciences and Botany
		Zoology, Ornithology, Entomology
		Marine Biology, Freshwater Biology and Limnology
		Ecology
Distantiant Colonian		Biodiversity Conservation
Biological Sciences		Biology
		Evolutionary Biology
		Behavioral Sciences Biology
		Mycology
		Other Biological Topics
		Agriculture
	Agriculture, Forestry and Fisheries	Forestry
Agriculture, Forestry and		Fishery
Fisheries		Soil Science
		Horticulture and Viticulture
		Agronomy, Plant Breeding and Plant Protection





Evaluation Panel	Scientific Area	Scientific Subarea
	Animal and Dairy Science	Animal and Dairy Science
		Husbandry
		Pets
	Veterinary Science	Veterinary Science
		Agricultural Biotechnology and Food Biotechnology
Animal and Veterinary Sciences		GM Technology (Crops and Livestock) and Livestock Cloning
and Agro-Food Biotechnology		Marker Assisted Selection
	Agricultural Biotechnology	Diagnostics
		Biomass Feedstock Production Technologies, Biopharming
		Agricultural Biotechnology related Ethics
	Other Engineering and Technologies	Food and Beverages
	Biological Sciences	Cell Biology
		Biochemistry
		Biochemical Research Methods
		Biophysics
Experimental Biology and Biochemistry		Genetics and Heredity
Diochemistry		Reproductive Biology
		Developmental Biology
		Microbiology
		Molecular Biology
Neurosciences	Basic Medicine	Neurosciences
	Basic Medicine	Anatomy and Morphology
		Human Genetics
		Pharmacology and Pharmacy
		Toxicology
Basic Medicine		Physiology
		Pathology
		Oncobiology
		Other Subareas of Basic Medicine





Evaluation Panel	Scientific Area	Scientific Subarea
	Basic Medicine	Immunology
		Tropical Medicine
	Health Sciences	Parasitology
		Infectious Diseases
		Andrology
		Obstetrics and Gynecology
		Pediatrics
		Cardiac and Cardiovascular Systems
		Peripheral Vascular Disease
		Hematology
		Respiratory Systems
		Critical Care Medicine and Emergency Medicine
		Anaesthesiology
		Orthopaedics
		Surgery
		Radiology, Nuclear Medicine and Medical Imaging
		Transplantation
Clinical Medicine, Immunology		Dentistry, Oral Surgery and Medicine
and Infection	Clinical Medicine	Dermatology and Venereal Diseases
		Allergy
		Rheumatology
		Endocrinology and Metabolism
		Gastroenterology and Hepatology
		Urology and Nephrology
		Oncology
		Ophthalmology
		Otorhinolaryngology
		Psychiatry
		Clinical Neurology
		Geriatrics and Gerontology
		General and Internal Medicine
		Other Clinical Medicine Subjects
		Integrative and Complementary Medicine
	Biological Sciences	Virology
	Other Medical Sciences	Forensic Science



Evaluation Panel	Scientific Area	Scientific Subarea
	Health Sciences	Health Care Sciences and Services
		Health Policy and Services
		Nursing
		Nutrition, Dietetics
		Public and Environmental Health
Health and Sport Sciences		Epidemiology
		Occupational Health
		Sport and Fitness Sciences
		Social Biomedical Sciences
		Medical Ethics
		Substance Abuse
		Psychology (including Human-Machine relations)
Psychology	Psychology	Psychology, Special (including Therapy for Learning, Speech, Hearing, Visual and other Physical and Mental Disabilities)
	Economics and Business	Economics, Econometrics
Economics and Business		Industrial Relations
		Business and Management
	Educational Sciences	Education, General (including Training, Pedagogy, Didactics)
Educational Sciences		Education, Special (to Gifted Persons, those with Learning Disabilities)
		Sociology
		Demography
		Anthropology
Sociology	Sociology	Ethnology
		Social topics (Women's and Gender Studies; Social Issues; Family Studies, Social Work)
	Law	
		Law, Criminology, Penology Other Subareas of Law
Law and Political Science	Political Science	Political Science Public Administration
		Organisation Theory





Evaluation Panel	Scientific Area	Scientific Subarea
		Environmental Sciences (Social Aspects)
		Cultural and Economic Geography
		Urban Studies (Planning and Development)
Social and Economic Geography	Social and Economic Geography	Transport Planning and Social Aspects of Transport
		Other Subareas of Social and Economic Geography
		Journalism
		Information Science (Social Aspects)
Media and Communication	Media and Communications	Library Science
		Media and Socio-Cultural Communication
		Other Subareas of Media and Communications
History and Archaeology	Listen and Anshered and	History
History and Archaeology	History and Archaeology	Archaeology
	Languages and Literature	General Language Studies Specific Languages
		General Literature Studies
Languages and Literature		Literary Theory
		Specific Literatures
		Linguistics
		Other Subareas of Languages and Literature
	Philosophy, Ethics and Religion	Philosophy
		Ethics
Philosophy		Theology
		Religious Studies
		History and Philosophy of Science and Technology
		Arts
	Arts	Design and Architecture
		Performing Arts Studies (Musicology, Theater Science, Dramaturgy)
Arts		Folklore Studies
		Studies on Film, Radio and Television
		Art History
		Other Subareas of Arts





ANNEX I - COMPONENTS OF THE APPLICATIONS

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.

Each application comprises the following sections:

1. GENERAL DATA:

Project Description

- indicates the title of the project;
- indicates up to four keywords that reflect the scientific content of the proposed research plan;
- indicate the project type;
- identifies the scientific domain, the main scientific area and subarea from the provided list (OECD's revised Field of Science and Technology - FOS, adapted to the call) and presents the respective justification;
- timetable.

2. INSTITUTIONS:

Description of each institution and its competencies for the development of the project.

The **Principal Contractor** must be a **legal entity belonging to the non-business entities of the R&I System**, namely higher education institutions, their institutes and R&D units, state or international laboratories with a head office in Portugal, non-profit private institutions whose main object is R&D activity and other non-profit public and private institutions developing or participating in scientific research activities.

The possible involvement of **foreign institutions as participants** in the project does **not confer them the status of beneficiary**.

3. RESEARCH TEAM:

- **PI** (must have at least 35% of working time dedicated to project)
- **PI CV synopsis** (describe the PI research, academic and professional experience, in the last 5 effective years of scientific activity. It must include at least 3 references of the PI)
- Members (Co-PI must have at least 25% of working time dedicated to project)
- Hirings
- Consultants
- Research team CV synopsis (provide the framework and skills of the research team and their coherence with the proposed work plan. It should focus on the last 5 years of effective scientific activity of the research team, indicating the most relevant scientific achievements of the research team and demonstrating its competence and skills in the area of the proposed project)

A **maximum of 4 Core CVs** must be presented: for PI, co-PI and 2 other team members (researchers considered as more relevant for the project).





The PI, co-PI, the core elements, as well as the remaining elements of the research team, are responsible for submitting an updated version of their CV in English on the CIÊNCIAVITAE.

- 4. WORK PLAN:
 - Abstract
 - Literature Review
 - Research Plan and Methods
 - Bibliographic References
 - Past Publications
 - Tasks
 - Project Timeline and Management
 - Ethical Issues (when applicable) are properly identified and addressed, according to the Ethics Self-Assessment Guide
 - 2030 Agenda
 - Other Funded Projects: list the approved projects (lead by PI or Co-PI) through peer-review (concluded or running projects)
 - Attachments: in addition to the mandatory annex with the timeline, the PI may attach the following documents to the proposal: support letters, formulas, schemes, diagrams, graphs or images. <u>No</u> <u>other documents than the ones previously mentioned should be considered in this section.</u>
- 5. INDICATORS in this section, the PI should indicate the:
 - **Expected output indicators**: a) Publications, b) Communications, c) Reports, d) Seminars and Conferences, e) Advanced Training, f) Others
 - Dissemination
- 6. **BUDGET** the following items are eligible for funding:

a) Direct costs:

i. <u>Human resources rationale:</u>

Expenses with **Human Resources** dedicated or related to the development of R&D activities related to the project execution in all mandatory components by the applicable labour legislation, including charges with grant holders directly supported by the beneficiaries;

- With regard to **employment contracts**, human resources expenses are based on the costs incurred in carrying out the project, based on the monthly base salary declared for the social protection of the worker, which may be increased by the mandatory social food allowance and occupational accident insurance under legally defined terms. The basic salary shall be the set of all remunerations of a permanent nature subject to taxation and declared for the purpose of social protection of the worker;
- The **research fellowships** are tendered and contracted by the beneficiary entities in the context of the supported projects, which must comply with the Research Fellowship Holder Statute (Law n.º 40/2004 of 18 August, in its present version) and FCT Regulation for Research Studentships and Fellowships.





- **ii. Missions,** expenses with travel, accommodation, registration fees, etc. in Portugal and abroad, and directly attributable to the project.
- **iii.** Acquisition of scientific and technical tools and equipment, indispensable to the project if used within the project during their useful lifetime.
- **iv.** Amortization of scientific and technical tools and equipment indispensable to the project and of which the useful lifetime falls within the execution period, but does not end within that period.
- v. Subcontracts, directly related to the project scientific task's execution.
- vi. Patent registration, expenses related to the national and foreign record of patents, copyrights, usefulness models and drawings, national models or brands when related to other forms of intellectual protection, namely rates, researches to the status of the technique and consulting expenses.
- vii. Demonstration, Promotion and Publication, expenses with the demonstration, promotion and disclosure of the project's outputs, namely dissemination fees within the fulfilment and pursuant to national policies of open access.
- **viii.** Adaptation of buildings and facilities, when essential to the development of the project, namely for environmental and security reasons, provided that these costs do not exceed 10% of the total eligible cost of the project.
- **ix.** Acquisition of other goods and services directly related to the project's execution, including costs with consultants that do not establish subcontracts.
- b) Indirect costs, with a flat rate of 25% of eligible direct costs, excluding subcontracting. The percentage bound in this item is automatically checked by the submission tool. Applications cannot be locked if this condition is not verified.

For the present Call, the **non-eligible costs** are the ones stated in the art. 9° of the <u>FCT Projects Regulation</u>. **Salaries of public servants** are **not funded under this call**.





PORTUGUESE TO ENGLISH TRANSLATION AND EXPLANATIONS

Agregação = Aggregation. This is an academic title. It attests:

- i.) the quality of the academic, professional, scientific and pedagogical curriculum;
- ii.) the capacity to carry out research supervision;
- iii.) the capability to coordinate and carry out independent research work, and is issued to PhD holders with a research and academic path after a public exam by a jury involving discussion of the CV, of a submitted curricular proposal and the presentation and discussion of a lecture.
- Doutoramento = PhD, doctoral degree

Mestrado = Master's degree

Licenciatura = BA (3, 4 or 5 years graduate course)

Bolsa = Grant, fellowship

Bolseiro = Grant holder, fellow

BII = Bolsas de Iniciação à Investigação = Research Initiation Grants

- Research Initiation Grants are intended for students enrolled in a Higher Professional Education, a 1st cycle of a Higher Education institution, an Integrated Master or Master to initiate their scientific training, within research projects to be developed in national institutions;
- These grants are also aimed at holders of a graduate degree, enrolled in courses that do not award an academic degree, integrated in an educational project of a higher education institution developed individually or jointly in their institutes or R&D units;
- These grants have a minimum duration of three months and may be renewable up to a maximum of one year.

BI = Bolsas de Investigação = Research Grants

- Research grants are intended for students enrolled in an Integrated Master, Master or Doctoral degree, for obtaining the respective scientific academic degree, through the development of scientific training integrated or not in R&D projects;
- These grants are also aimed at holders of a graduate degree or master, enrolled in courses that do not award an academic degree, integrated in an educational project of a higher education institution developed individually or jointly in their institutes or R&D units;
- These grants are, in principle, one year in length, and cannot be awarded for periods of less than three consecutive months;
- The grants may be renewable for additional periods up to:
 - One year, for grants awarded to graduated degree or master holders enrolled in courses that do not award an academic degree;
 - Two years, for grants awarded to students enrolled in master's courses;
 - Four years, for grants awarded to students enrolled in doctoral degrees;
 - These grants may be national, mixed or abroad, depending if the work plan occurs completely, partially or not in national institutions;





 For mixed research grants, the work plan performed in a foreign institution may not exceed 2 years.

BIPD= Bolsas de Investigação Pós-Doutoral = Postdoctoral Research Grants

- Postdoctoral Research Grants are intended for doctoral degree holders for the development of R&D activities;
- BIPDs are temporally restricted in order to stimulate the scientific employment and the use of researcher contracts as a rule instrument for their hiring, as well as to promote the development, in National Scientific and Technological System entities, of careers aiming at scientific research;
- BIPDs may only be granted provided that the following requirements are cumulatively met:
 - The doctoral degree has been obtained in the last three years before the submission date of the application grant;
 - The postdoctoral research is carried out in a host entity different than the one in which the research work was done to achieve the doctoral degree;
 - The research activities does not require post-doctoral experience;
 - The research activities have a development and execution period equal or less than three years.
- These grants are, in principle, one year in length, renewable for up to a total of three years, and cannot be awarded for periods of less than three consecutive months;
- Once the contract grant is finished, a new contract grant cannot be performed between the same host entity and the same fellow.

