

# Evaluation Guide

## Call for PhD Studentships – 2017

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**February 2017**

**FCT** Fundação para a Ciência e a Tecnologia

MINISTÉRIO DA CIÊNCIA, TECNOLOGIA E ENSINO SUPERIOR

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## **ABBREVIATIONS**

**CoI** - Conflict of Interest

**FEF** – Final Evaluation Form

**FOS** – Field of Science

**FCT** – Fundação para a Ciência e a Tecnologia, I.P.

**IEF** – Individual Evaluation Form

**ORCID** – Open Researcher and Contributor Identifier

**PEF** – Pre-Consensus Evaluation Form

**PD** – PhD Studentship

## 1. CALL

In 2017, with the aim of supporting advanced training, a single Call for the granting of PhD studentships will be launched.

**PhD studentships (PD) are aimed for applicants that fulfil the conditions required to join a study cycle that allows obtaining a PhD academic degree and that wish to develop research work that allows obtaining that degree.**

The studentship is, as a rule, annual, renewable up to four years, and the work plan may proceed fully or partially in a national institution (studentship in the country or mixed studentship), or proceed fully in a foreign institution (studentship overseas).

Studentships may not be granted for a period under three consecutive months. In case of a mixed PD, the period of the work plan in a foreign institution may, in no case, exceed two years.

## 2. ADMISSIBILITY

### 2.1. Applicant Admissibility Requirements

#### General Requirements

- Being a national citizen or a citizen from another member-state of the European Union.
- Being a citizen from a third-party state, a holder of a valid residence permit or a beneficiary of a long-term resident statute in the terms provided in [Law No. 23/2007](#), of July 4<sup>th</sup>, altered by Law No. 29/2012, of August 9<sup>th</sup>.
- Being a citizen from a third-party state with which Portugal has signed a reciprocity agreement.
- Residing permanently and usually in Portugal, if the work plan of the requested studentship proceeds, wholly or partially, in foreign institutions (mixed or overseas studentships – applicable to national or foreign citizens).

#### Specific requirements

- Having completed, until the date of submission of the application, a master degree or, alternatively, fulfilling, on that date, the conditions provided in items b) or c) of article 30 (1) of Decree-Law No. 74/2006, of March 24<sup>th</sup>, altered by Decree-Law No. 115/2013, of August 7<sup>th</sup>, for access to the study

cycle that allows obtaining the PhD degree.

- Not having benefited from a PhD or PhD in companies studentship directly funded by FCT, regardless of the duration thereof.

## 2.2. Application Admissibility Requirements

### Mandatory Submission Documents

It is imperative, under penalty of non-admission of the application, to complete the following procedures:

- Filling in/updating the applicant's Curriculum Vitae (CV) in the FCT-SIG platform or in the DeGóis platform.
- Ensuring that the scientific supervisor is associated to the application and seals the attachment of their CV.
- Ensuring that the co-supervisor(s) is(are) associated to the application and seal(s) the attachment of their CV(s) (procedure applicable only if the applicant chooses to appoint co-supervisor(s)).
- Detailing the work plan to be developed (note: attending the lectures of a PhD programme is not considered for purposes of the work plan).

It is also imperative, under penalty of non-admission of the application, to upload in the Application Form the documents specified below:

- Qualifications certificates for **all academic degrees obtained**, specifying the **final grade** obtained and, preferably, the grades obtained in all subjects completed. Hence in "post-Bologna" degrees, submission of the certificate for the first and second study cycles or, if it is not a two-stage education, of the integrated master's certificate, is mandatory; in "pre-Bologna" degrees, submission of the graduate certificate and of the master's certificate is mandatory.

Lack of certificates of academic degrees by applicants holding a 1<sup>st</sup> or 2<sup>nd</sup> cycle, pre- or post-Bologna, implies exclusion of the application from the Call. Applicants that do not have the 1<sup>st</sup> or 2<sup>nd</sup> cycle post-Bologna degrees, or a graduate or master pre-Bologna degree, must mandatorily attach to their application, in the proper field and in replacement of the certificate for the degree in question, a statement of responsibility and oath of honour stating that they do not hold that degree.

- Applicants that do not hold the academic degree of master must mandatorily submit a declaration

issued by the legally and statutorily competent scientific body of the university where they intend to be admitted for PhD, proving their capacity to attend this cycle of studies (deliberation made by the scientific Council of the entity that grants the degree, concerning the application to the PhD course for which the applicant is requesting a scholarship).

This declaration/deliberation will only be accepted if issued by the statutory body, and in conformity with the provisions of the PhD regulation of the university that grants the degree, a regulation published under and in compliance with the provisions of art. 38 of Decree-Law No. 74/2006, of March 24<sup>th</sup>, altered by Decree-Law No. 107/2008, of June 25<sup>th</sup>, and by Decree-Law No. 115/2013, of August 7<sup>th</sup>.

Proofs of enrolment, admission or attendance of PhD programmes **will not be accepted** in replacement of the declarations/deliberations mentioned above, even if they concern the PhD programme for which the studentship is being requested, nor will any other documents regardless of their form or nature.

- In case of academic degrees obtained overseas, records of acknowledgment of such degrees and conversion of the respective final grades to the Portuguese grading scale must be submitted (whenever a final grade was awarded to the foreign degree), issued by the Directorate General for Higher Education or by a Portuguese public higher education establishment (regime governed by Decree-Law No. 341/2007, of October 12<sup>th</sup>) or, alternatively, the document of acknowledgment/equivalence of the foreign qualifications with the corresponding Portuguese qualifications, issued by a Portuguese public higher education establishment, must be submitted (process governed by Decree-Law No. 283/83, of June 21<sup>st</sup>). We suggest visiting the portal of the Directorate General for Higher Education (DGES): <http://www.dges.mctes.pt>.

Note that submission of the record/acknowledgment/equivalence of foreign degrees to the corresponding Portuguese qualifications may not be replaced by the submission of a declaration of capacity to complete the PhD, even if issued by the competent statutory body of the entity that grants the degree (document mentioned in the paragraph above), given that this alternative applies only to applicants that do not hold the academic degree of master.

- A motivation letter, in which the applicant explains the reasons for their application and in which the applicant presents the achievement that they deem the most representative of their scientific/professional career.

- Two recommendation letters.

### **Documents of Optional Submission in the Application Form**

The following are elements of optional submission in the application form:

- Applicant's ORCID code. The ORCID record is recommended but does not replace entering the updated CV in the FCT-SIG or DeGóis platforms.
- Scientific supervisor's (and co-supervisor(s) if any) ORCID code.
- Document that better represents the applicant's scientific/professional career.
- Document of proof of permanent and usual residence in Portugal, when needed; it may be submitted only upon conditional granting of the studentship, for purposes of contracting thereof, as long as the date of issuance is equal to or prior to the date of submission of the application and if it is still valid on the date of the studentship contracting. On this matter, see the Application Guide for the Call.

## **3. EVALUATION PROCESS**

### **Guiding Principles of Peer review**

It is the mission of FCT to ensure the global scientific quality of the peer review process:

- The evaluators shall give precedence to quality and originality over quantity. This attitude will prevail regardless of what is at stake, be it academic degrees, CVs, career progression, or work plans. The scientific content represents the essential core of peer review, which requires an integrated vision of all components of a scientific career or a research work plan. The number of publications and the cumulative computing of impact factors, for example, does not allow, in itself and in isolation, identifying the characteristics that define the quality of achievements and of the scientific careers: their "originality", "consistency and coherence", and their "contribution to the advancement of knowledge".
- Impartiality and transparency are fundamental principles for evaluation decisions. All applications will be treated and assessed impartially, on the base of their merit, regardless of their origin or of the applicant's identity.

### **3.1. Establishment of Evaluation Panels**

Evaluation panels are formed by experts with renowned scientific merit and experience, selected to

carry out the evaluation of the applications submitted. In establishing the Evaluation Panels, whenever possible, the following criteria will be followed: disciplinary and multidisciplinary coverage, gender balance and institutional diversity.

The assessment work developed by each panel is coordinated, under FCT's invitation, by one of its members, who has the responsibility for assuring that the evaluation exercise is carried out with transparency, independence and equality. The coordinator of each panel shall be a researcher of renowned scientific merit. The coordinator **may never be a supervisor or co-supervisor** of applicants with applications submitted under the evaluation panel that they coordinate, but may, nevertheless, **be the supervisor or co-supervisor of applicants of other evaluation panels**. The coordinator may not assess any applications.

According to the number of applications submitted in each panel, one or more co-coordinators may also be appointed to assist the coordinator in their tasks. Co-coordinators are appointed by the coordinator, among the members of the respective panel, and the latter deputises on them the tasks deemed necessary to the good management of the work of the panel. Evaluators appointed as co-coordinators, accumulate the tasks of co-coordination with those of evaluator of the applications that were distributed to them.

Co-coordinators and evaluators may not be supervisor or co-supervisor of applicants with applications submitted under the evaluation panel that they are part of, but may be supervisor or co-supervisor of applicants with applications submitted under other evaluation panels.

Evaluation panels will be formed based on the adaptation of the FOS Classification of the Frascati Manual (*OECD's Revised Field of Science and Technology Classification in the Frascati Manual* – see Annex I).

Applications are assigned to the different panels according to the main scientific area, secondary scientific area and scientific subarea stated by the applicant, in accordance with the table included in Annex I. The scientific areas and subareas identified by the applicant **may not be altered by the evaluation panel**.

The Evaluation Guide and the constitution of the Evaluation Panels are made public in the FCT's webpage. The composition of the evaluation panel will be published until the beginning of the application evaluation.

### 3.2. Coordination of Evaluation Panels

The coordinator of each evaluation panel receives from FCT a set of access codes that allows them to access digitally all applications submitted to their evaluation panel.

In collaboration with FCT, the coordinator is responsible for:

- Ensuring that the evaluation exercise is carried out with transparency, independence and equality;
- Verifying the adequacy of applications to the panel;
- Appointing one or more co-coordinators to support them in their functions, if applicable;
- Deputising on co-coordinator(s) the tasks deemed necessary to the good management of work of the panel;
- Allocating applications for remote individual evaluation and appointing the first and second reader of each application;
- Solving conflicts of interest (CoI) declared or identified;
- Ensuring that all members of the panel know and apply the criteria and sub-criteria established and the respective weighing of such criteria/sub-criteria;
- Watching for the compliance with the deadlines granted to evaluators to prepare the individual and pre-consensus evaluation forms;
- Ensuring that, when filling in the individual and pre-consensus evaluation forms, evaluators justify their grading with substantive and clear arguments that allow understanding the assessment and grade attributed to each applicant;
- Moderating the live meeting of the evaluation panel and ensuring a collegial process of consensus building and decision;
- Assuring that the final evaluation form is prepared until the end of the live meeting of the panel;
- Guaranteeing that the comments that justify the decisions are in accordance with the provisions of this guide and applicable legislation and are consistent and coherent;
- Appointing a co-coordinator, or another member of the panel, to replace them in case of need;
- Preparing the minute of the meeting, together with the other members of the evaluation panel;

- Collaborating with FCT to solve problems and/or pitfalls that may occur before, during and/or after the panel evaluation meeting;
- Coordinating the prior hearing process.

### **3.3. Remote and Live Evaluation**

#### **Initial Procedure: Remote Evaluation**

- Each application is assessed individually by at least two evaluators from the respective evaluation panel.
- If eventually any of the evaluators invited is in a situation of Conflict of Interest concerning any of the applications, they must so declare formally to the coordinator of their evaluation panel. In that case, the respective application must not be attributed to them. These declarations must be included in the minute of the panel.
- Whenever justified, the coordinator may, during the remote evaluation period, request from FCT the opinion of an external expert or, in case of need, the integration of another evaluator in the panel.
- An application shall be deemed not assessable when it is substantively removed from the scientific area in which it was submitted (final grade equivalent to zero). The evaluation panel must jointly validate this decision during the evaluation panel meeting and that must be made explicit and justified in the minute.
- An application shall also be deemed not assessable when a violation of at least one of the mandatory admissibility requirements of the applicant or application is identified, whenever it has not been identified in the prior stage of administrative review of admissibility.
- The individual evaluation process is carried out digitally, and the evaluators must remotely fill in an Individual Evaluation form (IEF) for each application that they are assigned to.
- In the IEF, the evaluators must separately grade the three evaluation criteria (see below) and prepare the respective comments, so as to justify the grade awarded.
- For each application, one of the evaluators will be appointed as first reader and another as second reader.
- After the individual assessments by the evaluators is completed, it is up to the first reader to prepare

a pre-consensus evaluation form (PEF) in a period stated by FCT and always before the live meeting of the panel, during which all forms will be appreciated and validated. PEF assumes an agreement between the evaluators about the comments and interim proposed final grade.

- In case two assessors do not reach an agreement, it will be up to the coordinator to ensure consensus building on the final evaluation of that application based on IEF, using, if necessary, the opinion of one more evaluator or external expert.

### **Second procedure: Live Evaluation**

The aims of the meeting of the evaluation panel are:

- To review the merit of the applications submitted to the panel, based on the IEF and PEF and the interim proposed ranking, prepared from the scores of the two IEF.
- To establish a collective and collegial dialogue about the merit of each application. During the meeting, the evaluators, especially the first readers, must be prepared to present a summary of strengths and eventual weaknesses of each of the applications that were distributed to them. Any member of the panel, regardless of their area of specialisation, may question or comment on the information provided or the opinion of any other member.
- In the discussion on the relative merit of the applications, if any assessor or the coordinator is in a situation of Conflict of Interest, they must leave the room; if the coordinator is in that situation, they will appoint, among the other members of the panel, an element to replace them when they absent themselves from the meeting.
- To carry out filling in and validation of the final evaluation forms (FEF). In preparing the FEF, a responsibility of the first reader, the IEF and PEF must be taken into account, as must the discussion and collegial opinion of the panel.
- To prepare the final ranked list of all applications. All members of the panel are responsible for the discussion of the relative merit of each application and for the preparation of a single ranked list of applicants, per panel.

### **3.4. Comments to be transmitted to Applicants**

- Assessors must bear in mind the need to produce clear, coherent and substantive justifications for the grades awarded. It is a responsibility of the panel coordinator to guarantee that, in filling in the FEF,

evaluators justify the grades with substantive arguments that allow understanding the meaning of the assessment, identifying the strengths and weaknesses of each criterion. Hence, no general comments will be accepted, such as “very weak works plan”, “adequate CV”, etc.

- Besides the comments that justify the grade awarded to each of the three evaluation criteria, the final evaluation form transmitted to applicants must also include the explanation for eventual bonuses (e.g., bonus applied to applicants with a level of incapacity) and/or the non-awarding of bonuses.

In the comments that justify the grades awarded, the evaluation panel must also observe the following general recommendations:

- Avoid comments that describe or are a mere summary of elements included in the application;
- Do not use the first person;
- Use analytic and impartial language, avoiding depreciative comments about the applicant, the works plan proposed, the supervisors, etc.;
- Avoid making questions, given that the applicant may not reply.

### **3.5. Minute of the Evaluation panel Meeting**

The minute of the panel meeting is a responsibility of all elements and must be signed by all, being the coordinator responsible for writing it down.

Said minute must include:

- The names of all partakers in the evaluation panel meeting;
- The list of conflicts of interest detected;
- The identification of applications deemed not assessable;
- The list of grading and ranking of applicants;
- Eventual vote delegations for reasons of justified absence.

### **3.6. Conflicts of interest (Col)**

If the coordinator of the evaluation panel is him/herself in a situation of Col concerning any of the applications submitted to the panel, he/she must so declare to FCT at the beginning of the process of application assigning to evaluators.

If any of the evaluators are in a situation of Col concerning any of the applications, they must so declare

formally to the coordinator of their evaluation panel as early as possible. In this case, the coordinator of the evaluation panel must not assign the said application(s) to that evaluator.

The Col declarations must mandatorily be included in the minute of the panel meeting. The coordinator of the evaluation panel, in collaboration with FCT, is responsible for compiling a list including the reference, as well as the name of the applicant and assessor with Col.

The situations of Col of the coordinator or assessors include, but are not limited to:

- Belonging to the host institution of the application (Research Department or Unit).
- Having published scientific works with the applicant or with the applicant's supervisor or co-supervisor(s) in the three years prior to the date of opening of the application period.
- Having ongoing scientific collaboration with the applicant, their supervisor or co-supervisor(s).
- Being of kin with the applicant, with their supervisor or co-supervisor(s).
- Having a scientific or personal conflict with the applicant, with their supervisor or co-supervisor(s).
- Being in any other situation that may raise doubts to the applicant or to an external entity about their capacity to assess the application impartially.

### **3.7. Confidentiality**

The confidentiality of all applications must be protected and guaranteed at all moments of the process. All coordinators, co-coordinators, evaluators and external experts shall sign a confidentiality statement concerning the whole evaluation process, and the content of the applications that they had knowledge of; they may not copy, quote or use any type of material contained therein.

## **4. EVALUATION CRITERIA**

All applications must be graded from 1.000 (minimum) to 5.000 (maximum) in the three evaluation criteria considered:

- i) Applicant's Merit.
- ii) Merit of the work plan.
- iii) Merit of Hosting Conditions.

For purposes of ulterior decision about granting studentships, applicants will be ranked according to the

weighted average of the grade in the three criteria. The evaluation criteria will have the following relative weighing: Applicant’s Merit 40%; merit of the work plan 30%; merit of Hosting Conditions 30%.

In cases of tie, the tie-breaking shall be done by the grade of Applicant’s Merit and, if the tie persists, by the grade of merit of the work plan. The grade of merit of hosting Conditions shall be the third tie-breaking criterion.

Grades in any of the evaluation criteria shall be awarded with three decimal digits. Values resulting from the application of formulas shall be rounded to the third decimal digit using the following criterion: when the fourth decimal digit is equal to or greater than 5 (five) it shall be rounded in excess; if lesser, the value of the third decimal digit shall be upheld.

#### 4.1. Applicant’s Merit

Applicant’s Merit, a criterion with a relative weighing of 40%, is assessed from 2 sub-criteria:

- i) Academic career (from a Base Grade), with a 70% contribution in Applicant’s Merit.
- ii) Personal curriculum (mirroring their scientific and professional career), with a contribution of 30% in Applicant’s Merit.

##### 4.1.1 Sub-criterion Academic career

The applicant’s grade in this sub-criterion results from the final grades obtained in the 1st and 2nd study cycle (or just the first cycle, when applicable), in accordance with the reference table for the definition of the applicant’s Base Grade (Table 1).

**Table 1:** Reference table for definition of the Base Grade

Final average Graduate degree + Master degree or Integrated Master degree	Final grade Graduate degree Pre- or post-Bologna	Base Grade
≥ 17	-	<b>5.000</b>
16	-	<b>4.000</b>
-	≥ 17	<b>3.500</b>
15	-	<b>3.500</b>
-	16	<b>3.000</b>
14	-	<b>2.500</b>
-	15	<b>2.500</b>
< 14	-	<b>1.500</b>
-	14	<b>1.500</b>
-	< 14	<b>1.000</b>

Note: to compute the Base Grade the prevailing grade is that included in the degree certificates.

To apply Table 1 bear in mind the following:

- The final average of the “graduate degree+master degree” (first column of Table 1) in a post- or pre-Bologna career is a result of the simple arithmetic average of the final grade obtained in the first cycle/graduate degree and the final grade obtained in the second cycle/master degree, by applying the following formula:

$$\text{Final average (graduate degree +master degree)} = \frac{\text{final grade 1st cycle (graduate degree)} + \text{final grade 2nd cycle (master degree)}}{2}$$

The average grade resulting from the above formula will be rounded to the unit using the following criterion: when the first decimal digit is equal to or greater than 5 (five) rounding will be by excess; when lower, the value of the unit shall be upheld.

- In the case of Integrated Master degrees whose institutions do not issue certificates with discrimination of final grades for 1st and 2nd cycle, consider the final grade listed in the degree certificate after conclusion of the study cycle (300 to 360 ECTS).

Cases not included in any of the situations defined in Table 1, namely master degrees obtained after non-academic careers, such as master degrees not preceded of a 1st cycle of post-Bologna education, or a pre-Bologna graduate degree, will be specifically reviewed and decided by the evaluators.

In the case of certificates that specify a qualitative grade only (for example, pre-Bologna master degrees), it will be converted in the terms expressed in Table 2, for purposes of computing the final average (graduate degree + master degree) and consequent ascertainment of the Base Grade (third column of Table 1):

**Table 2:** Table for conversion of qualitative into quantitative grades

Qualitative Grade	Quantitative Conversion
Very good with Distinction/with Distinction and Appraisal/ <u>Magna Cum Laude</u> /Summa	<b>18</b>
Very good/Approved with Distinction/Good with Distinction/Cum Laude	<b>16</b>
Good/Approved/Approved by Unanimity	<b>14</b>

Certificates that do not specify the final grade (neither quantitative nor qualitative) and certificates of foreign degrees that do not display grades converted to the Portuguese scale, will be equalled to the minimum grade (Base Grade = 1) for purposes of ascertaining the score of the criterion “Applicant’s Merit”, sub-criterion “academic career”.

When applicants state more than one graduate degree or master degree, it is up to the evaluation panel to decide which academic degrees are more adequate to the work plan and must thus be counted for the Base Grade in the sub-criterion academic career. The evaluation panel may also consider all degrees stated by the applicant in the assessment of the personal curriculum. In any case, the criteria used must be explained in the minute and the final evaluation form.

Table 3 summarises the main situations described above and the respective solutions to be used as to identify the Base Grade that should be considered to ascertain the score of the criterion “Applicant’s Merit”, sub-criterion “academic career”.

**Table 3:** Definition of the Base Grade

	<b>Certificates attached to the application <sup>(1)</sup></b>	<b>Methodology to ascertain the Base Grade</b>
1	Graduate certificate + master’s certificate, both with final grade <sup>(2)</sup> .	Base Grade computed by applying the 1st column of Table 1
2	Integrated master’s certificate with single final grade (1 <sup>st</sup> + 2 <sup>nd</sup> cycles)	Base Grade computed by applying the 1st column of Table 1
3	National graduate certificate, pre- or post-Bologna, with final grade <sup>(2)</sup> or foreign graduate certificate with grade converted to the Portuguese scale, without master degree, but with declaration/deliberation by the Scientific Council confirming capacity to complete the PhD	Base Grade computed by applying the 2nd column of Table 1
4	National graduate certificate, pre- or post-Bologna, with final grade <sup>(2)</sup> or foreign graduate certificate with grade converted to the Portuguese scale + Master’s certificate (national or foreign) without final grade (neither qualitative nor quantitative) or, in case of foreign certificate, without grade converted to the Portuguese scale	Base Grade computed by applying the 2nd column of Table 1
5	Graduate certificate (national or foreign) without final grade (neither qualitative nor quantitative) or, in case of foreign certificate, without grade converted to the Portuguese scale + national master degree certificate with final grade <sup>(2)</sup> or master’s foreign certificate with grade converted to the national scale	Base Grade to be decided by the panel
6	Without graduate degree but with national master degree certificate with final grade <sup>(2)</sup> or master’s foreign certificate with grade converted to the national scale	Base Grade to be decided by the panel
7	Submission of more than one graduate degree and/or master degree	Base Grade to be decided by the panel

	Certificates attached to the application <sup>(1)</sup>	Methodology to ascertain the Base Grade
8	Without graduate degree and without master degree, but with declaration/deliberation by the Scientific Council confirming capacity to complete the PhD	Equivalence to the minimum grade (Base Grade = 1)
9	Graduate certificate (national or foreign) without final grade (neither qualitative nor quantitative) or, in case of foreign certificate, without grade converted to the Portuguese scale, without master degree, but with declaration/deliberation by the Scientific Council confirming capacity to complete the PhD	Equivalence to the minimum grade (Base Grade = 1)
10	Graduate certificate and master's certificate (national or foreign), both without final grade (neither qualitative nor quantitative) or, in case of foreign certificate, without grade converted to the Portuguese scale	Equivalence to the minimum grade (Base Grade = 1)

<sup>(1)</sup> Foreign certificates may be deemed valid only when their acknowledgment record is submitted, or alternatively, when a document of acknowledgment/equivalence of foreign qualifications with the corresponding Portuguese qualifications is submitted. The respective grades may be used, for purposes of computing the Base Grade, only if officially converted to the Portuguese grading scale (by DGES or by a public higher education establishment).

<sup>(2)</sup> If the final grade is qualitative, and before Table 1 is applied, it must be converted to a quantitative grade by applying Table 2.

### Bonuses

Applicants that state a level of incapacity, duly proven and equal to or above 90%, shall have a bonus equivalent to 10% of the value of the Base Grade. Applicants that state a level of incapacity, duly proven, equal to or above 60% and under 90%, shall have a bonus of 5%.

Ascertainment of the score in the sub-criterion “academic career” shall thus be obtained by applying the following formula:

$$Score\ of\ academic\ career = (base\ grade) \times \left(1 + \frac{bonus\ rate\ \%}{100}\right) \times 0.7$$

#### 4.1.2 Sub-criterion Personal curriculum

When assessing this sub-criterion the evaluators must review the curriculum of the applicant in an integrated way, from a global vision of the merit of their scientific and professional career. It is important to consider the motivation letter and letters of recommendation (documents of mandatory submission) and the different dimensions of the curriculum that may demonstrate a relevant scientific and professional career. In particular, the quality of the document (or artistic achievement) listed in the applicant’s motivation letter as being the most representative or explicative of their scientific/professional career must be assessed.

The score awarded shall translate the assessor's conclusion about the whole curriculum and must be justified with the greatest detail possible, clearly and consistently, with identification of strengths and weaknesses.

Ascertainment of the score in the sub-criterion "personal curriculum" shall be obtained by applying the following formula:

$$\text{Score of personal curriculum} = \text{Grade awarded to personal curriculum} \times 0.3$$

### **Total Score of Applicant's Merit**

In conformity with the preceding paragraphs, the total score of applicant's merit is obtained by applying the following formula:

*Total Score Applicant's Merit*

$$= (\text{base grade}) \times \left(1 + \frac{\text{bonus rate \%}}{100}\right) \times 0.7 + (\text{grade personal curriculum} \times 0.3)$$

### **4.2. Merit of the work plan**

This criterion has a 30% relative contribution. Assessors shall assess the merit of the work plan taking into account three main quality criteria of a research project:

- Justified relevance of the object of study;
- Scientific approach (state of the art, methodology);
- Feasibility of the work plan.

As for the relevance of the object of study, one must value the clear definition of aims and questions of research, the potential input of the research project to the knowledge and advancement of science and technology, as well as, if relevant, their possible socioeconomic impact.

As for the scientific approach, the merit of the state of the art stated and of the research methodology proposed will be assessed, taking into account their clarity, consistency and coherence, in accordance with internationally accepted standards.

As far as the feasibility of the work plan, adequacy of human resources and of the methodologies relative to the tasks and aims provided in the work plan and respective deadlines will be valued. If applicable, review of risks inherent to the different stages that it integrates will also be assessed, eventually with preliminary identification of the most critical points and the corresponding contingency measures to be adopted.

The score to be given will translate the evaluator's conclusion about the three dimensions considered in an integrated way and will be justified with as much detail as possible, clearly and consistently.

#### **4.3. Merit of Accommodation Conditions**

This criterion has a relative contribution of 30%. Evaluators shall value the merit of the Hosting Conditions under two main dimensions that support the quality of supervision and the framework, both institutionally and from the point of view of the research team:

- Scientific merit, trustworthiness and experience in the scientific area at stake of the supervisor (and co-supervisor(s), if any).
- The quality of work conditions and supervision for the applicant, assessed by the adequacy of the research team and means offered by the research unit for full execution of the works plan proposed. This assessment is based on the demonstration that the applicant makes about the adequacy of the means available in the institution where the works plan will be carried out.

The score to be awarded will translate the evaluator's conclusion about the two dimensions considered in an integrated way and will be justified with as much detail as possible, clearly and consistently.

**Annex I – Scientific Areas, adapted from the FOS Grade of the Frascati Manual**

Main scientific area	Secondary scientific area	Subarea	Evaluation panel
<b>1<sup>st</sup> Exact Sciences</b>	<b>1.1 Mathematics</b>	Pure Mathematics	Mathematics
		Applied Mathematics	
		Statistics and Probabilities	
		Other, please specify:	
	<b>1.2 Computation and Computer Science</b>	Computation Sciences	Computation and Computer Science
		Bioinformatics	
		Computer Science	
		Other, please specify:	
	<b>1.3 Physics</b>	Atomic Physics	Physics
		Molecular Physics	
		Chemical Physics	
		Condensed Matter Physics	
		Particle Physics	
		Nuclear Physics	
		Physics of Fluids and Plasmas	
		Optics	
		Acoustic	
		Astronomy	
	Other, please specify:		
	<b>1.4 Chemistry</b>	Organic Chemistry	Chemistry
Inorganic Chemistry			
Nuclear Chemistry			
Physic Chemistry			
Polymer Chemistry			
Electrochemistry			
Colloid Chemistry			
Analytic Chemistry			
Medicinal Chemistry			
Other, please specify:			

Main scientific area	Secondary scientific area	Subarea	Evaluation panel
<b>1b Natural Sciences</b>	<b>1.5 Earth Sciences</b>	Geosciences and Multidisciplinary Studies	Earth Sciences
		Mineralogy	
		Palaeontology	
		Geochemistry	
		Geophysics	
		Physic Geography	
		Geology	
		Volcanology	
		Meteorology	
		Atmospheric Sciences	
		Climate Research	
		Oceanography	
		Hydrology	
		Hydric Resources	
	Other, please specify:		
	<b>1.6 Biological Sciences</b>	Cellular Biology	Experimental Biology and Biochemistry
		Microbiology	
		Virology	
		Biochemistry	
		Molecular Biology	
		Biochemistry Research Methods	
		Biophysics	
		Genetics and Heredity	
		Biology of Reproduction	
		Development Biology	
		Botany	Biological Sciences
		Zoology	
		Mammalogy	
		Herpetology	
		Ichthyology	
		Ornithology	
		Entomology	
		Mycology	
Behavioural Biology			
Marine Biology			
Aquaculture			
Freshwater Biology			
Limnology			
Ecology			
Biology of the Evolution of Species			
Conservation of Biodiversity			
Other, please specify:			
<b>1.7 Environmental Sciences</b>	Environmental Sciences	Environmental Sciences	

Main scientific area	Secondary scientific area	Subarea	Evaluation panel
<b>2 Sciences of Engineering and Technology</b>	<b>2.1 Civil Engineering</b>	Civil Engineering	Civil Engineering
		Architectural Engineering	
		Building Engineering	
		Municipal Engineering	
		Structural Engineering	
		Transport Engineering	
		Other, please specify:	
	<b>2.2 Electrotechnical and Electronic Engineering</b>	Electrotechnical and Electronic Engineering	Electrotechnical and Electronic Engineering
		Robotics	
		Automation and Control Systems	
		Communications and Systems Engineering	
		Telecommunications	
		Hardware and Computer Architecture	
		Other, please specify:	
	<b>2.3 Mechanical Engineering</b>	Mechanical Engineering and Engineering Systems	Mechanical Engineering
		Applied Mechanics	
		Thermodynamics	
		Aerospace Engineering	
		Nuclear Engineering	
		Manufacturing Processes	
		Sound Engineering and Reliability Analysis	
		Other, please specify:	
	<b>2.4 Chemical Engineering</b>	Chemical Engineering	Chemical Engineering
		Engineering of Chemical Processes	
		Other, please specify:	
	<b>2.5 Materials Engineering</b>	Materials Engineering	Materials Engineering and Nanotechnologies
		Ceramics	
		Coatings and Films	
Composites			
Paper and Wood			
Textiles			
Nanomaterials			
Other, please specify:			
<b>2.6 Medical Engineering</b>	Medical Engineering and Biomedical Engineering	Bioengineering and Biotechnology	
	Laboratorial Technology		
	Other, please specify:		
<b>2.7 Environmental Engineering</b>	Environmental Engineering	Environmental Engineering and Environmental Biotechnology	
	Geologic Engineering		
	Geotechnics		
	Oil, Energy and Fuel Engineering		
	Remote Control		
	Mines and Mineral Processes		
	Maritime Engineering		
	Naval Engineering		
	Oceanographic Engineering		
	Other, please specify:		

Main scientific area	Secondary scientific area	Subarea	Evaluation panel
<b>2 Sciences of Engineering and Technology</b>	<b>2.8</b> Environmental Biotechnology	Environmental Biotechnology	Environmental Engineering and Environmental Biotechnology
		Bioremediation	
		Diagnose Biotechnologies in Environmental Management	
		Ethics of Environmental Biotechnology	
		Other, please specify:	
	<b>2.9</b> Industrial Biotechnology	Industrial Biotechnology	Bioengineering and Biotechnology
		Bioprocessing Technologies	
		Biocatalysis	
		Fermentation	
		Bioproducts	
		Biomaterials	
		Bioplastics	
		Biofuels	
		New Bio-Derived Materials	
Bio-Derived Chemicals			
Other, please specify:			
<b>2.10</b> Nanotechnology	Nano-devices	Materials Engineering and Nanotechnologies	
	Nano-processes		
<b>2.11</b> Food Engineering and Technology	Food Engineering and Technology	Agricultural and Food Technologies	
	Other, please specify:		

Main scientific area	Secondary scientific area	Subarea	Evaluation panel
<b>3 Medical and Health Sciences</b>	<b>3.1 Basic Medicine</b>	Biomedicine	Biomedicine and Basic Medicine
		Anatomy and Histology	
		Humana Genetics	
		Immunology	
		Neurosciences	
		Pharmacology	
		Biopharmaceuticals	
		Toxicology	
		Physiology	
		Pathology	
		Other, please specify:	
	<b>3.2 Clinical Medicine</b>	Andrology	Clinical Medicine and Health Sciences
		Obstetrics and Gynaecology	
		Paediatrics	
		Cardiac and Cardiovascular System	
		Haematology	
		Respiratory System	
		Intensive Care Medicine and Emergency Medicine	
		Anaesthesiology	
		Orthopaedics	
		Surgery	
		Radiology, Nuclear Medicine and Medical Imaging	
		Transplants	
		Stomatology	
		Oral Medicine and Surgery	
		Dermatology	
Infectious Diseases			
Allergology			
Rheumatology			
Endocrinology and Metabolism			
Gastroenterology and Hepatology			
Urology and Nephrology			
Oncology			
Ophthalmology			
Otolaryngology			
Psychiatry			
Clinical Neurology			
Geriatrics and Gerontology			
General and Family Medicine			
Internal Medicine			
Other Areas of Clinical Medicine			
Complementary Medicine and Integrative Medicine			
Other, please specify:			

Main scientific area	Secondary scientific area	Subarea	Evaluation panel
<b>3 Medical and Health Sciences</b>	<b>3.3 Health Sciences</b>	Health Care and Services	Clinical Medicine and Health Sciences
		Health Services and Policies	
		Nursing	
		Nutrition and Dietetics	
		Public Health and Environmental Health	
		Tropical Medicine	
		Parasitology	
		Epidemiology	
		Work Medicine	
		Occupational Health	
		Sports Sciences	
		Biomedical Social Sciences	
		Bioethics and History and Philosophy of Medicine	
	Addiction		
	Other, please specify:		
	<b>3.4 Medical Biotechnology</b>	Biotechnology Applied to Health	Bioengineering and Biotechnology
		Technologies that involve manipulation of Cells, Tissues, Organs or the whole Body	
Gene-based Diagnose and Therapies			
Ethics Related to Medical Biotechnology			
Other, please specify:			
<b>3.5 Forensic Sciences</b>	Forensic Chemistry and Biochemistry	Clinical Medicine and Health Sciences	
	Other, please specify:		

Main scientific area	Secondary scientific area	Subarea	Evaluation panel
<b>4 Agricultural Sciences</b>	<b>4.1</b> Agriculture and Forestry	Agriculture	Agriculture, Forestry and Fisheries
		Forestry	
		Production of Plants	
		Science of Soils	
		Horticulture	
		Viticulture	
		Agronomy	
		Protection of Plants	
	Other, please specify:		
	<b>4.2</b> Animal and Dairy Science	Zootechnical and Dairy Science	Science Animal and Veterinary Sciences
		Livestock Breeding	
		Pets	
		Other, please specify:	
	<b>4.3</b> Veterinary Sciences	Veterinary Sciences	
		Other, please specify:	
	<b>4.4</b> Agricultural and Food Biotechnology	Agricultural Biotechnology and Food Biotechnology	Agricultural and Food Technologies
		Genetic Manipulation Technology	
		Domestic Animal Cloning	
		Selection Based on Molecular Markers	
		Diagnose	
Biomass Production Technologies			
Ethics Related to Agricultural Biotechnology			
Other, please specify:			
<b>4.5</b> Fisheries	Fisheries	Agriculture, Forestry and Fisheries	

Main scientific area	Secondary scientific area	Subarea	Evaluation panel
5 Social Sciences	5.1 Psychology	Psychology	Psychology
		Criminal Psychology	
		Other, please specify:	
	5.2 Economics and Management	Economics	Economics and Management
		Management	
		Other, please specify:	
	5.3 Educational Sciences	General Education	Educational Sciences
		Other, please specify:	
	5.4 Sociology	Sociology	Sociology
		Sociologic Criminology	
		Social Service	
		Other, please specify:	Anthropology
	5.5 Law	Law	Law
		Other, please specify:	
	5.6 Political Sciences	Political Science	Political Sciences
		Military Sciences	
		Other, please specify:	
	5.7 Economic and Social Geography	Economic and Social Geography	Economic and Social Geography
		Geographic Urbanism	
Other, please specify:			
5.8 Communication and Information Sciences	Documental and Information Sciences	Communication and Information Sciences	
	Journalism and Media		
	Other, please specify:		
5.9 Science Communication and Management	Science Communication	Science Communication and Management	
	Science Management		

Main scientific area	Secondary scientific area	Subarea	Evaluation panel
<b>6 Humanities</b>	<b>6.1</b> History and Archaeology	History	History and Archaeology
		Archaeology and Conservation	
		Other, please specify:	
	<b>6.2</b> Languages and Literatures	Literature	Literary Studies
		Portuguese Studies	
		Romanic Studies	
		Anglophone Studies	
		Classical Studies	
		Asian and African Studies	
		Germanic Studies	
		Other, please specify:	
	Linguistics	Linguistics	
	<b>6.3</b> Philosophy, Ethics and Religion	Philosophy	Philosophy, Ethics and Religion
		Theology and Studies on Religion	
		Other, please specify:	
	<b>6.4</b> Arts	Fine Arts	Arts
		Musicology	
Visual Performative Arts (Cinema, Television, Drama, Dance, etc.)			
Other, please specify:			
History of Art		Museology and History of Art	
Museology			
Architecture and Urbanism			
Design	Design, Architecture and Urbanism		
<b>6.5</b> History of Science and Technology	History of Science and Technology	History and Archaeology	
	Other, please specify:		