

R&D Units Evaluation 2023/2024

Evaluation Guide

January 2024



Index

I. INTRODUCTION	3
II. FUNDING COMPONENTS AND OBJECTIVES	4
III. R&D UNITS ELEGIBILITY	5
IV. BASIC PRINCIPLES FOR THE EVALUATION	6
V. EVALUATION CRITERIA	7
VI. SCORING SYSTEM	10
VII. CRITICAL COMPONENTS OF THE APPLICATION FOR EVALUATION	12
VIII. FUNDING COMPONENTS	13
IX. EVALUATION PROCESS, GUIDELINES, AND GENERAL EVALUATION SCHEME	14
1. EVALUATION PANELS	14
2. EVALUATION PHASES AND METHODOLOGY	14
3. Phase (1): INDIVIDUAL EVALUATION	16
4. Phase (2): REMOTE INTERVIEW AND SITE VISITS GUIDELINES	16
5. Remote Interview	17
6. Site visit	17
7. Phase (3): PANEL MEETING	18
X. Recommendations	19
1. Overall quality grade	19
2. Justifications, comments, and recommendations	19
3. Recommendations for Programmatic Funding	19
4. Panel meeting report	20
5. Comments to FCT	20
Appendix I: List of Evaluation Panels	21
Appendix II : Laboratory Intensity Levels	22
Appendix III: Procedures Regarding Conflicts of Interest and Confidentiality	23

I. INTRODUCTION

The Portuguese Foundation for Science and Technology (FCT) is the national research funding organization that promotes excellence, innovation, and international competitiveness across all areas of scientific research, including exact, natural and health sciences, engineering, arts, social sciences, and humanities.

By supporting, assessing and funding talented researchers, ground-breaking ideas and internationally competitive research centres, FCT aims to create a community of skilled researchers through sustainable advanced training and scientific careers of excellence, foster international competitiveness and visibility of scientific research and innovation carried out in Portugal, encourage knowledge exchange between R&D centres and businesses, allow access of the scientific community to state-of-the-art infrastructures and support the development of internationally leading research centres.

FCT's main mission is:

- to promote, evaluate, fund, and accompany research units, programmes, projects, advanced education and training, and scientific careers.
- to promote and support infrastructures for scientific research and technological development.
- to promote the diffusion of scientific and technological culture and knowledge.
- to stimulate availability, interconnection and reinforcement of up-to date science and technology information sources.

The R&D Units are important research performing entities of the National Science and Technology System, as defined by the legal regime for scientific institutions known as “the Law of Science” (Decree-law 63/2019, May 16), which combine human resources, equipment, and a technical infrastructure dedicated to R&D, and provide scientific and technological training and outreach. These Units that result from a bottom-up approach are the backbone of the Portuguese research ecosystem, being either associated with higher education institutions or acting as independent research centres.

At present, Portugal has 312 R&D Units covering all scientific domains and spreading over the Portuguese territory. Dimension ranges from small-sized units of less than 30 researchers to large units of over 300 researchers. Over the past 25 years, the evolution of R&D Units has shaped the Portuguese science, technology, and innovation ecosystem, contributing to a knowledge-based society. A description of the Portuguese science system and of R&D units is available in the [Atlas of Research Units](#) published in 2022.

FCT funds R&D Units through a Multiannual Funding Programme based on the results of a competitive evaluation of performance and strategic planning made by independent external international evaluators. This national assessment exercise occurs every four/five years. It is expected that the R&D Units, apart from improving the overall research quality at national and international levels, also provide an attractive scientific environment for advanced training, and a framework for scientific employment and R&D projects. It is also expected that R&D Units will seek to combine multiple funding sources, particularly from European programmes.

The period to be considered in the evaluation is from 1st January 2018 to 31st December 2023.

II. FUNDING COMPONENTS AND OBJECTIVES

The funding awarded by the FCT includes two complementary funding components:

- i) **Base funding**, indexed to the result of the evaluation, the size of each R&D unit, and the laboratory intensity.
- ii) **Programmatic funding**, to be proposed by the evaluation panel considering the funding requests of the R&D units and its specific needs.

FCT **base funding** to R&D units aims to:

- a) Stimulate and improve the overall activity of R&D Units, thereby strengthening the institutional organization of the national system of science and technology.
- b) Support access to adequate resources for R&D activities and actions, namely by creating, strengthening, or valuing the necessary conditions for the R&D unit to better achieve their objectives.
- c) Contribute to the impact of results and projects already concluded and to their dissemination to the R&D community and society.

FCT **programmatic funding** to R&D units aims to support:

- a) A multi-annual plan for hiring researchers in 2025-2029.
- b) Early career researchers.
- c) Internationalization activities and promotion of European Formal R&D networks in 2025-2029.
- d) Specific infrastructure and equipment in 2025-2029.
- e) Internal projects of the R&D Unit.
- f) Advanced training programmes of the R&D Unit.

III. R&D UNITS ELEGIBILITY

The R&D Units eligible to apply are those currently funded by FCT, resulting from the reorganization of existing R&D Units, including the merging or extinction of R&D Units, or new R&D Units. R&D Units that individually or in a consortium have obtained the status of Associated Laboratory are also eligible to this evaluation.

When defining the research team of the R&D unit, each Integrated PhD holder researcher should be classified into one of the following three categories:

- a) Higher education faculty members and researchers with exclusive or full-time contracts – Weighting Factor (WF) = 1
- b) Higher education faculty members and researchers with part-time contracts and excluding those covered by paragraph c) – Weighting Factor (WF) = 0,5
- c) Higher education faculty members and researchers with residual dedication to R&D activities, on a weekly average of 20% of their working time - Weighting Factor (WF) = 0,2

Integrated PhD holder members, hired in the framework of the mission of Technology and Innovation Centres, Clinical Academic Centres, State Laboratories, or Collaborative Laboratories may be counted according to paragraph c).

Each R&D unit must incorporate Integrated PhD holder researchers with a sum of weighting factors (WF) equal to or greater than 10, determined in accordance with number 2 of article 13 of the Regulation.

A researcher can only be an **Integrated** Researcher in one R&D Unit but can be a Collaborator Researcher in other R&D Units. The activities or merit of Collaborator Researchers are not to be considered in the evaluation.

IV. BASIC PRINCIPLES FOR THE EVALUATION

- **Excellence:** R&D units selected for funding must demonstrate the quality of the research activities according to the criteria defined in the call.
- **Transparency:** Funding decisions must be based on clearly described rules and procedures, supported by an adequate feedback in agreement with the outcome of the evaluation.
- **Fairness and impartiality:** All proposals are treated equally and evaluated impartially on their merits, irrespective of their origin or the identity of the applicants.
- **Confidentiality.** All proposals and related data, knowledge, and documents submitted to the call are confidential.
- **Efficiency:** Evaluation, award, and grant preparation should be as fast as possible, commensurate with maintaining the quality of the evaluation, and respecting the legal framework.
- **Ethical and security considerations:** Any proposal which contravenes fundamental ethical principles or fails to comply with the relevant security procedures may be excluded at any time from the evaluation process, selection, and award.

V. EVALUATION CRITERIA

When applying the evaluation criteria, the panel should give primacy to assessing quality, merit, and relevance over a mere quantification of contributions. As part of FCT's commitment to The Agreement on Reforming Research Assessment as set out by the [Coalition for Advancing Research Assessment \(CoARA\)](#), Evaluation Panels are therefore advised not to use metrics as a surrogate measure of the quality.

The R&D Unit evaluation follows **three evaluation criteria, which are the following:**

- A. **Quality, merit, relevance, level of collaboration, and internationalization of R&D activity carried out in the evaluation period**, measured by international standards, considering the originality, consistency and rigor, the relevance of the results, their dissemination, the participation in advanced training and the development and consolidation of careers, the hosting conditions for researchers and the contribution to the promotion of scientific and technological culture. These elements will be also evaluated considering the strategic plan proposed in the last evaluation exercise, if applicable.
- B. **Scientific and technological merit of the research team**, particularly of the integrated PhD members, evidence of international and national recognition and connection to society. If applicable, due to the nature of the R&D activities, also the cultural or artistic merit available in the team.
- C. **Quality, merit, and relevance of the scientific objectives, the overall strategy, the activity plan and the organization of the R&D unit for the next five years**, including plans for advanced training, particularly the scientific conditions to support PhD programmes, hiring new researchers and stabilizing research careers, evidencing the associated institutional co-responsibility, in coherence with the trajectory of the R&D unit.

Application of the above-mentioned criteria must show the value, among others, of the contributions of R&D units to the following aspects:

Criteria A

- Clear statement on the advancement of knowledge and respective impact with a reference to publications, patents, models, prototypes, products or any other relevant research and innovation indicators.
- Degree of internationalization and collaborative research of the R&D outputs.
- Advanced training of researchers including Master and PhD students or post-docs.
- The development and consolidation of careers in different levels, including the integration of researchers into permanent positions, and the impact of FCT scientific employment instruments on the activities of the unit.
- The quality of hosting conditions of researchers, such as, mentoring plans, gender and equality and inclusiveness actions and fair and transparent evaluation mechanisms, among others.

- Promotion and dissemination of scientific and technological research, dissemination of results and actions to promote scientific culture, including, the organization of conferences, colloquia, and seminars.
- Knowledge and technology transfer, such as the creation of *spin-offs* or industry partnerships.
- Effort to secure funding from diverse sources national and international (e.g. ERC, EU funding, regional and/or other from funding agencies).
- Preservation, curation and dissemination of R&D results and data, respecting the principles and practices of Open Science; promotion of scientific and technological culture (outreach); actions of scientific, technological, cultural, artistic, social or economic relevance to society; existence of Data Policies.

In the evaluation of this criterion, special attention should be given to up to 5 contributions selected by the R&D Unit as the most relevant outputs during the period under consideration (item 5.2 of the application), and to the selected full-text publications (item 5.3 of the application). The high-quality contributions should be considered for judging productivity in proportion to the size of the team of Integrated Researchers in the R&D Unit application.

The conditions of the R&D Units to host doctoral programmes and doctoral students regarding research facilities and the competence of potential supervisors should be evaluated based on the data provided in the application, interviews and on the site visit. The organizational structure of the R&D Unit should be adequate to its objectives and activities and will also be considered in the assessment.

Panel Members should also take into consideration, if applicable, the strategic plan proposed by the R&D Unit in the previous evaluation exercise. The panel will assess if those objectives were achieved, taking in consideration the funding received by the R&D Unit.

Criteria B

- Evidence of international and national recognition of the research team.
- Evidence of interaction and benefits for the society.
- Skills and composition of the research team to adequately execute the proposed programme.
- Ability to successfully compete for national and international research grants and contracts, including contracts with companies when applicable.

Please note that the evaluation of Criterion B applies only to researchers with a “Nuclear CV” and respective Narrative CV. The activities or merit of Collaborator Researchers are not to be considered in this evaluation.

Criteria C

- Quality, merit, relevance, impact, originality/differentiation, and ambition of the objectives and the overall proposed strategic programme for the next five years, including ethical concerns, whenever applicable, Open Science, gender and data policies, budget, and programmatic funding request.

- Appropriate R&D Unit management and organizational structure, including science communication and outreach activities, citizen science, technology transfer and IP protection policies.
- Plans for advanced training, particularly the scientific conditions to support PhD programmes, evidencing the benefit to the PhD programme from the proximity of research activity of the R&D unit.
- Adequate HR management, including developing the condition to attract and retain qualified human resources, such as plans for hiring new researchers.
- Career development strategy for researchers at all stages of their careers, regardless of their contractual situation, including for researchers on fixed-term contracts. Please refer to the R&D Unit strategy for countering precarity and integrating researchers into permanent career positions. Whenever applicable, please refer to applications within the FCT-Tenure programme, namely R&D Chairs, in coherence with the dimension, current Human Resources profile, and trajectory of the R&D unit.

It is given a higher weight to the contributions and performance during the preceding 5-years period (A), followed by the merit of the team of researchers (B), and by the intentions or visions for the future given in the next 5-year strategic plan (C). The relative weight of the three evaluation criteria is described in the table 1 below:

Table 1 – Relative weight of criterion A, B, and C

A	40%
B	35%
C	25%

VI. SCORING SYSTEM

The evaluation criteria are rated **with integers from 1 to 5, where 5 is the highest value**. The criteria scores should be applied considering the guidelines in table 2:

Table 2 – Scoring descriptors.

Score	Guidelines
1	Criterion addressed in an inadequate manner, or with serious inherent weaknesses
2	Proposal broadly addresses the criterion, but with significant weaknesses
3	Proposal addresses the criterion well, but improvements would be necessary
4	Proposal addresses the criterion very well, but certain improvements are still possible
5	Proposal successfully addresses all relevant aspects of the criterion in question. Any shortcomings are minor

The overall R&D Unit grade (g), where $g = 40\%A + 35\%B + 25\%C$, is calculated by applying the scores to the criteria A, B and C, and rating the quality of the R&D unit as EXCELLENT, VERY GOOD, GOOD, or WEAK, corresponding to the following descriptions and overall scores.

EXCELLENT: It is expected that an excellent R&D Unit has a **majority of the team of Integrated PhD Researchers** having performed innovative R&D of recognized quality and merit, contributing to the advancement of knowledge and/or its application, being an **international reference in one or more areas** of activity, and setting the objectives, strategy, plan of activities and organization for 2025-2029 which are adequate to proceed with R&D activities rated as excellent in an international context. The score of an excellent R&D unit is indicatively in the range, **g = [4.4-5.0]**

VERY GOOD: It is expected that a Very Good R&D Unit has a majority of the team of Integrated PhD Researchers having performed innovative R&D of recognized quality and merit, contributing to the advancement of knowledge and/or its application, being a national reference in one or more areas of activity, and setting the objectives, strategy, plan of activities and organization for 2025-2029 which are adequate to achieve R&D activities rated as excellent in an international context. The score of a Very Good R&D unit is indicatively in the range, **g = [3.7-4.3]**

GOOD: It is expected that a Good R&D Unit has a team of Integrated PhD Researchers having performed innovative R&D of recognized quality and merit, contributing to the advancement of knowledge and/or its application in one or more areas of activity, but with limited or reduced internationalization, and setting objectives, strategy, plan of activities and organization for 2025-2029 which are adequate to achieve R&D activities aiming at national excellence. The score of a Good R&D unit is indicatively in the range, **g = [3.0-3.6]**

WEAK: It is expected that a Weak R&D Unit has few Integrated PhD Researchers having performed R&D of national and international quality and merit, and the other researchers having performed R&D of limited quality and merit in one or more areas of activity, and/or with serious

flaws regarding objectives, strategy, plan of activities and organization for 2025-2029. The score of a Weak R&D unit is **g < 3**.

Only R&D Units graded with an overall score (g) as Good, Very Good, or Excellent are eligible for funding.

VII. CRITICAL COMPONENTS OF THE APPLICATION FOR EVALUATION

To facilitate this assessment, applicants were asked to identify and summarily describe up to 5 contributions that the R&D Unit considers to be the most relevant and representative during the period between January 2018 and December 2023 (item 5.2 of the application) period, illustrating the main publications by the team of Integrated PhD Researchers (item 5.3 of the application), as well as, to indicate a limited number of “Nuclear CV” (3, 5, 10, 15, 20 for R&D Units with, respectively, <20, 20-39, 40-79, 80-160, >160 integrated PhD holder) selected by the R&D Unit for their quality, merit, relevance of the associated contributions and representativeness of the activities developed by the R&D Unit (item 5.4 of the application). Moreover, a limited number of full-text publications (5, 10, 15, 20, 25 for R&D Units with, respectively, <20, 20-39, 40-79, 80-160, >160 integrated PhD holder) for the 2018-2023 period that the R&D Unit considers more relevant, and representative is also provided (item 5.3).

VIII. FUNDING COMPONENTS

The funding to be awarded has two components:

- a) **Base Funding (BF)** – is calculated as:

$$BF = N * Ufg * f$$

Where **N** is the sum of weighting factors (WF) of integrated PhD holder researchers included in the application, and **Ufg** is the unit funding per WF of integrated researchers for each grade level, with **g** as the grade (good, very good, and excellent). The values for *Uf good*, *Uf verygood* and *Uf excellent* will be decided by the FCT Board of Directors after the evaluation and considering the total available 5-year budget for R&D Units. The **f** factor depends on the laboratory intensity levels (high, medium, or low - Appendix II)

- b) **Programmatic Funding** – can only be awarded to R&D Units with the overall grade Excellent, Very Good, or Good, if judged appropriate and upon duly justification by the Evaluation Panel, based on the assessment of the R&D Unit activity plan for the next funding period (2025-2029), the results obtained in the period from January 2018 to December 2023, and on the identification of specific needs. The amount to be applied in Programmatic Funding is limited to about one third of the total funding for the R&D Units Multiannual Funding Program.

IX. EVALUATION PROCESS, GUIDELINES, AND GENERAL EVALUATION SCHEME

1. EVALUATION PANELS

Evaluation Panels are formed by international reviewers appointed by the Board of Directors of FCT and will be announced on the FCT website when the provisional evaluation results (before the phase of applicants' rebuttals/preliminary hearings) are communicated to the applicants.

All reviewers are of reputed competence in the scientific areas of the applications under evaluation and cannot be affiliated with any Portuguese R&D Institution. The constitution of the Evaluation Panels takes into consideration the number of submitted applications and their scientific areas, as well as balances of gender and geographical and institutional distribution of the reviewers' affiliations.

All panel members should comply with the conditions listed in Appendix III concerning the declaration of Conflicts of Interest.

It is the responsibility of the R&D Unit to select, in the application form, the most appropriate Evaluation Panel. The list of the 29 Evaluation Panels is given in Appendix I.

Each Evaluation Panel must contain at least five R&D Units. If this number is not achieved for a given panel, the applications submitted to that Panel will be channelled to the alternative Evaluation Panel found most suitable in dialogue with the R&D Unit. In this case, that Unit will be able to request a multidisciplinary evaluation, if necessary.

In this call, the R&D units may choose a multidisciplinary evaluation by selecting **up to two additional Evaluation Panels** during the registration period. The R&D unit will be evaluated by at least one member from each additional panel previously selected, in addition to the main panel. This ensures a comprehensive evaluation of all relevant disciplines addressed by the R&D unit. The multidisciplinary evaluators will participate in all phases of the evaluation process, including visiting the units, whenever possible and upon proposal from the panel chairperson.

Exceptionally, the assessment of external reviewers on specific R&D Units may be requested by FCT or the Evaluation Panel chair during the remote stage, whenever it is found that a particular expertise is not covered by the Evaluation Panel. The external reviewers can provide helpful information and analysis to be considered by the panel members.

2. EVALUATION PHASES AND METHODOLOGY

The evaluation process of the R&D Units (Figure 1) comprises the following phases, further detailed in table 3:

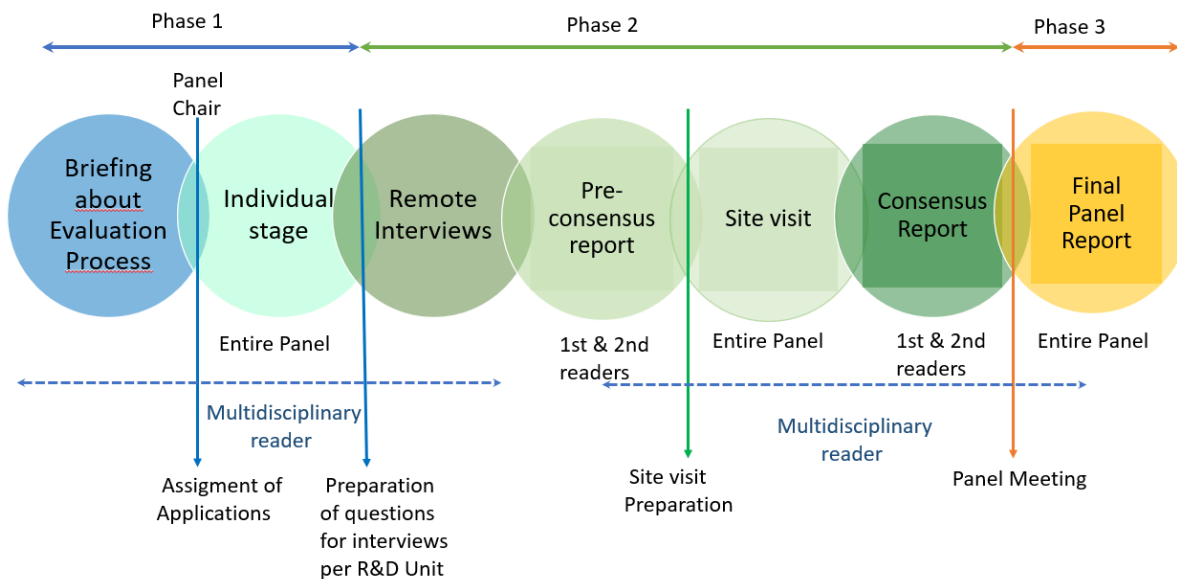


Figure 1 – Schematic representation of the stages of the evaluation process.

Phase 1 – Individual evaluation.

Phase 2 – Interviews and site visits.

Phase 3 – Panel meeting.

Table 3 - Evaluation Process table describing the chronogram of each stage

Phase	Action	Date
1	Briefing with panel chairperson for preparation of the process	Mar 2024
	Allocation to 3 readers (one acting as rapporteur) by the panel chairperson and up to 2 multidisciplinary readers*	Apr 2024
	Briefing with each panel	
	Individual reports from all panel members	Apr-mid May 2024
	1 st reader drafts questions to be addressed, assisted by the other 2 nd readers	
	Remote meeting for preparation of evaluation interviews	
2	Remote interviews with the R&D units	May to mid-Oct 2024
	1 st reader produces the pre-consensus report, assisted by the other 2 nd readers	
	Remote meeting for preparation of site visit	
	Site visit evaluation of the R&D units	
	1 st reader closes the consensus report , assisted by the other 2 nd readers	

3	Collegial panel meeting to close the evaluation of the R&D units and conclusion of the panel reports to be conveyed to the R&D Units	
	Preliminary hearings	mid-Jan 2025

* Multidisciplinary readers will participate in all phases of the evaluation process, including visiting the units, whenever possible and upon proposal from the panel chairperson.

3. Phase (1): INDIVIDUAL EVALUATION

In phase 1, each application is reviewed by all panel members. **All panel members should be familiarized with the proposals, elaborating each an individual report, formulating questions, and preparing the following phases of interaction.** The individual evaluation reports shall consider the three evaluation criteria.

A *rapporteur* is assigned by the panel chair to each R&D Unit, and is responsible for drafting a consensus report, assisted by the two fellow 2nd readers, taking into consideration the individual reports of the peers. In the cases where a multidisciplinary evaluation will occur, a maximum of 5 panel members (3 reviewers from the original panel, plus maximum 2, each from other distinct panels), will be responsible for providing a comprehensive evaluation of the R&D Unit.

This is a preliminary report, and as such is prone to changes during the subsequent phases.

4. Phase (2): REMOTE INTERVIEW AND SITE VISITS GUIDELINES

One component of the evaluation process is the interaction with the R&D units, which includes remote interviews and site visits. **The Evaluation Panel prepares the remote interviews and site visits** based on the work done in Phase 1, by collegially deciding on a specific list of questions and issues to be addressed before each of the above-mentioned moments of interaction, that should be answered by the R&D Unit. The panel will decide if there are complex questions that may require information, that may not be immediately available. These will be sent in advance to the R&D Unit.

The duration of the interaction with each R&D unit depends on the R&D Unit dimension given by number of integrated PhD holder researchers, as detailed in Table 4. The site visit will be carried out ideally by all evaluators of the panel and accompanied by one FCT scientific officer.

The remote interviews and face-to-face site visit should clarify aspects left unclear in the individual stage. The same criteria from phase 1 (A, B and C) apply to assessments of leadership, work environment for fostering scientific creativity, talent attraction and development, and scientific careers development, facilities and other material resources, technical and science management, and communication support. It should also complement the information for detection of specific cases or resources, research team talent or competencies of exceptional quality or value, on funding sources, and the information relevant to possible awarding of Programmatic Funding for each of the specific purposes addressed in the R&D Unit application. Information on major constraints to the operation of the R&D Unit as identified by the coordinator, or other key researchers should be also considered.

Table 4 – Schedule of the remote interviews and face-to-face site visits

	R&D Unit / integrated members	Up to 100	100-150	>150
Remote interviews	Plenary session presentation	1 h	1 h	1 h
	PhD Students	30 min	45 min	1 h
	Post-docs & juniors (<6 years)	30 min	45 min	1 h
	Senior Researchers (>6 years)	30 min	45 min	1 h
Site visit	Visit to facilities	Up to 60 min	Up to 75 min	Up to 90 min
	Max Total time	3h30min	4h30min	5h30m

The panel will decide which specific laboratories, equipment and other infrastructures will be visited.

5. Remote Interview

The rapporteur will lead the discussions during the remote interviews. In the plenary session, a brief presentation of the R&D Unit will be given, usually by the R&D Unit coordinator, showing the objectives, main research lines of work and special aspects of the funding requested. This presentation should take up to 20 minutes maximum. The participation of key team members is expected in this session, as well as different integrated researchers that may answer specific questions from the Evaluation Panel. A short video showing major facilities may also be included in the plenary session.

The interviews should include meetings with PhD students, postdoc and early-stage researchers, as well as with senior researchers. The coordinator and co-coordinator should not participate in these meetings. The proposed time allocation for the interviews is described in table 4. FCT requires to R&D Units to provide a list of participants per interview category to give them access to the session links.

6. Site visit

The whole panel will visit each R&D Unit on site, with the objective to further complement the information gathered during the interviews. This visit has a maximum duration of 90 minutes (see table above). The panel may request the presence of specific elements of the R&D Unit, from students to researchers.

The consensus evaluation form should be closed by the designated rapporteur considering the assessment of the panel at the site visit.

7. Phase (3): PANEL MEETING

A **final panel meeting** will take place after the conclusion of all remote interviews and site visits for the R&D Units comprised in each evaluation panel. In this meeting, the rapporteur of each R&D Unit will present the evaluation highlights to the panel for a collegial discussion and decisions.

The remaining Evaluation Panel members should analyse the application and reports submitted in the previous phases for the R&D Unit in sufficient depth to have a well-informed view on its overall evaluation and to actively engage in the discussion. During the Panel meeting a **collegial assessment** of the R&D Units is made, considering:

- a) The reports submitted in Phases (1) and (2) for each the R&D Unit.
- b) The critical analyses of external reviews when applicable.
- c) The discussions within the Evaluation Panel.

The final evaluation panel report is edited by the rapporteur, and it must be submitted by the Evaluation panel chairperson. The final evaluation report will be disclosed to the R&D Unit at the end of the evaluation process. This report will be made public once all legal requirements regarding prior hearing rights have been completed.

X. Recommendations

1. Overall quality grade

The overall R&D Unit grade (g) is calculated by applying the scores to the criteria A, B and C, and rating the quality of the R&D unit as EXCELLENT, VERY GOOD, GOOD, or WEAK, corresponding to the descriptions and overall scores. The evaluation criteria are rated with integers from 1 to 5, where 5 is the highest value.

2. Justifications, comments, and recommendations

The ratings and the overall grades of the three evaluation criteria must be justified in detail and **substantive comments and recommendations should be provided** regarding R&D activities and results, the team of integrated researchers, the objectives, strategy, plan of activities, reasonability of funding and budget, organization, ethical concerns if applicable, as well as the conditions of the R&D Units to host doctoral programmes and doctoral students, and other aspects that may be considered relevant. Strengths and weaknesses of the R&D Unit as a whole and, if applicable, comments on Research Groups and/or Thematic Lines should be addressed. General descriptions or summaries used in the R&D Unit's proposal should not be used in the Evaluation Panel's report, as well as dismissive statements about applicants or the proposed science, on the contrary, factual, and clear language should be used to convey the final evaluation.

3. Recommendations for Programmatic Funding

Programmatic Funding is limited to the available budget and can be (or not) awarded to R&D Units with the overall grades of Excellent, Very Good or Good, when justified by a specific proposal of the respective Evaluation Panel on the basis of an assessment of the R&D Unit plan for the next funding period (2025-2029), on the results obtained in 2018-2023, and on the detection of specific needs that, in the Evaluation Panel understanding, should be met by this type of funding, which may include the targeted funding for the following purposes:

- i. Support a multi-annual plan for hiring researchers, including scientific employment for researchers and, when applicable, evidence of commitment with the FCT tenure funding instrument
- ii. Support for early career researchers
- iii. Support for internationalization activities and promotion of formal R&D networks
- iv. Support for specific infrastructure and equipment
- v. Support for seed projects of the R&D Unit
- vi. Support for advanced training programmes of the R&D Unit

The final evaluation report must contain the justification of the amount to be awarded, comments and recommendations of all the components of recommended Programmatic Funding.

4. Panel meeting report

The final panel report must address the following issues:

- Working methodology adopted by the panel.
- Identification of disqualifying Conflict of Interest.
- The provisional ranked list of all Units under evaluation by the panel and their corresponding grade.
- Programmatic funding.

This report is signed by the panel chairperson after the agreement of all Panel Members.

5. Comments to FCT

This document provides information to FCT about the general assessment and evaluation process for each panel. It is available for being filled in by any of the Evaluation Panel Members, but must be submitted by the Evaluation panel chairperson, focusing on three items:

- General description of specific aspects adopted by the panel for the working methodology.
- Detection of resources or competencies of exceptional value.
- General assessment of the R&D area covered by the Evaluation Panel and of the perspectives for its further development.

Appendix I: List of Evaluation Panels

ENGINEERING SCIENCES AND TECHNOLOGIES - Civil and Geological Engineering
ENGINEERING SCIENCES AND TECHNOLOGIES - Computer Sciences and Information Technologies
ENGINEERING SCIENCES AND TECHNOLOGIES - Materials Sciences and Engineering, and Nanotechnology
ENGINEERING SCIENCES AND TECHNOLOGIES - Electrical and Computer Engineering
ENGINEERING SCIENCES AND TECHNOLOGIES - Mechanical Engineering and Engineering Systems
ENGINEERING SCIENCES AND TECHNOLOGIES - Chemical and Biological Engineering
EXACT SCIENCES -Physics
EXACT SCIENCES - Mathematics
EXACT SCIENCES - Chemistry
HEALTH SCIENCES - Biomedicine
HEALTH SCIENCES - Clinical and Translational Research
HEALTH SCIENCES - Public Health, Nursing, Health Technologies
HEALTH SCIENCES - Sport Sciences
NATURAL SCIENCES - Agricultural, Agro-food and Veterinary Sciences
NATURAL SCIENCES - Biological Sciences, Biodiversity and Ecosystems
NATURAL SCIENCES - Earth and Environmental Sciences and Technologies
SOCIAL SCIENCES - Language and Communication Sciences
SOCIAL SCIENCES - Educational Sciences
SOCIAL SCIENCES - Law
SOCIAL SCIENCES - Political Sciences
SOCIAL SCIENCES - Economics
SOCIAL SCIENCES - Management
SOCIAL SCIENCES - Psychology
SOCIAL SCIENCES - Sociology, Anthropology and Geography
ARTS AND HUMANITIES - Architecture and Urbanism
ARTS AND HUMANITIES - Arts and Design
ARTS AND HUMANITIES - Literary Studies
ARTS AND HUMANITIES - History and Archaeology
ARTS AND HUMANITIES - Philosophy

Appendix II : Laboratory Intensity Levels

Laboratory Intensity Levels	Level Description
High [f=1,2]*	R&D unit with equipments and/or laboratories, or that participates in campaigns and/or other field activities, that have significant operating and maintenance costs, in relation to the base funding of R&D unit.
Medium [f=1,1]	R&D unit with archives, libraries or platforms for public use, database infrastructures of national and European value and other equipment and laboratories not falling within the previous “high” definition.
Low [f=1,0]	R&D unit lacking significant levels of the aforementioned elements.

*f is the multiplicative factor to be applied in the base funding.

The three levels of weighting should result in clear criteria:

- The weighting should be applied according to the profile of each R&D Unit and not according to scientific or thematic areas.
- In case the R&D Unit chooses intensity high or medium it should indicate and justify its option.
- The evaluation panels are free to accept or change the classification proposed by each R&D Unit.
- The level of laboratory intensity, which is to be validated by the evaluation panels, has direct implications in the core funding attributed to the R&D Units.

Appendix III: Procedures Regarding Conflicts of Interest and Confidentiality

I. Chairperson Disqualifying Conflicts of Interest

A disqualifying conflict of interest (Col) for a specific proposal exists if the panel chairperson has:

- a) First-degree relationship, marriage, life partnership, domestic partnership with any researcher affiliated with a R&D unit under assessment.
- b) Personal/financial interest in the application's success or financial interest by persons listed under no. 1.
- c) Dependent employment relationship with the research unit, presently or in the last 10 years.
- d) Pending transfer to the research unit or to a participating institution.
- e) Active in a council or similar supervisory board in the research unit; close scientific cooperation, with the senior members of the research unit (PIs, members of the R&D unit Board of Directors and the Unit Director) within the last 10 years of the opening date of the present call, namely:
 - research projects.
 - visiting lecturer/fellow/professor or similar status or has worked on a commercial contract or consultancy basis.
 - joint publications, co-investigator or co-holder of a grant/research project, supervision or co-supervision of one or more doctoral students.

A potential conflict of interest may exist¹ for a specific proposal, even in cases not covered by the clear disqualifying conflicts indicated above, if there is in any other situation that could cast doubt on his or her ability to evaluate the proposal impartially, or that could reasonably appear to do so in the eyes of an external third party.

The aforementioned situations constitute a disqualifying Col for the panel Chairperson, preventing him/her to participate in the process in this role.

¹ The FCT Board will decide whether a potential COI constitutes a true (disqualifying) conflict of interest or not.

II. Panel Member Disqualifying Conflicts of Interest

A disqualifying conflict of interest (Col) for a specific proposal exists if the reviewer (panel member or external reviewer) has:

- a) First-degree relationship, marriage, life partnership, domestic partnership with any researcher affiliated with a R&D unit under assessment.
- b) Personal/financial interest in the application's success or financial interest by persons listed under no. 1.
- c) Dependent employment relationship with the research unit, presently or in the last 5 years.
- d) Pending transfer to the research unit or to a participating institution.
- e) Active in a council or similar supervisory board in the research unit; close scientific cooperation, with the senior members of the research unit (PIs, members of the R&D unit Board of Directors and the Unit Director) within the last 5 years of the opening date of the present call, namely:
 - research projects.
 - visiting lecturer/fellow/professor or similar status or has worked on a commercial contract or consultancy basis.
 - joint publications, less than 20 co-authors or 10 affiliations.
 - co-investigator or co-holder of a grant/research project, supervision or co-supervision of one or more doctoral students.

A potential conflict of interest may exist² for a specific proposal, even in cases not covered by the clear disqualifying conflicts indicated above, if there is in any other situation that could cast doubt on his or her ability to evaluate the proposal impartially, or that could reasonably appear to do so in the eyes of an external third party.

Panel members with identified ColS will not evaluate the corresponding applications nor will participate in the collegial evaluation discussion.

An external reviewer will not be able to proceed in case of a disqualifying conflict of interest. In this case the external reviewer is required to inform FCT of the situation, for re-allocation of the application. The Final Evaluation Panel Report must mention all declared Conflicts of Interest.

Should a Conflict of Interest emerge for any Evaluation Panel member, the Panel Coordinator should solve it supported by FCT and an explicit mention of it should be made in the Final Evaluation Panel Report.

Confidentiality

The confidentiality of the R&D Units applications and the evaluation material and results must be protected. All members of Evaluation Panels or external reviewers are asked not to copy, quote, or

² The FCT Board will decide whether a potential COI constitutes a true (disqualifying) conflict of interest or not.

otherwise use material contained in the applications. They are also requested to sign a statement of confidentiality.

