

EVALUATION GUIDE

Call for Advanced Computing Projects (3rd edition)

Ref.: FCT/CPCA/2022/01

Table of contents

1.	Intr	oduct	tion	.2
	1.1.	Abo	ut FCT	2
	1.2.	Abo	ut RNCA	2
2.	Call	for A	dvanced Computing Projects – 3rd Edition	.3
	2.1.	Mai	n Aspects of the Call	3
	2.2.	Con	nputational Models	3
	2.2.	1.	High Performance computing (HPC)	3
	2.2.	2.	Scientific Cloud Computing (SCC) or Virtual Research Environment (VRE)	3
	2.3.	Тур	es of Access	4
	2.3.	1.	A0 – Experimental Access	4
	2.3.	2.	A1 – Preparatory or Development Access	4
	2.3.	3.	A2 – Project or Regular Access	5
	2.4.	Ava	ilable Resources	5
	2.5.	Ben	eficiaries and Project Eligibility Criteria	6
3.	Eva	luatio	on Criteria	.7
	3.1.	Expl	anation of Main Criteria	8
	3.1.	1.	Technical Suitability	8
	3.1.	2.	Scientific Merit	9
	3.2.	Scor	ing, Formula and Weights	.12
4.	Eva	luatio	on Process and Procedures	13
	4.1.	Gen	eral Information	.13
	4.2.	Con	stitution of the Technical Suitability Panels	.13
	4.3.	Con	stitution of the External Scientific Panels	.13
	4.3	1.	Scientific Evaluation Process	14

	4.4.	Constitution of the Access Committee	14
	4.4.	1. Ranking of Proposals and Resources Allocation by the AC	14
5.	Con	fidentiality and Conflicts of Interest	.15
	5.1.	Confidentiality	15
	5.2.	Conflicts of Interest (CoI)	15
6.	Glos	ssary	.16
7.	Арр	endix - Applications Evaluation Calendar	.17

1. Introduction

1.1. About FCT

Fundação para a Ciência e a Tecnologia, I.P. (FCT), the Portuguese Foundation for Science and Technology, is the public agency responsible for implementing the Portuguese government's science and technology policy.

FCT funds all areas of knowledge, including exact, natural and health sciences, engineering, social sciences and humanities.

FCT's mission is to promote the advancement of scientific and technological knowledge in Portugal, exploring opportunities to attain the highest international standards, in any scientific or technological domain, and to stimulate the diffusion of that knowledge and its contribution to improve education, health, environment, and quality of life and well-being of citizens.

FCT pursues its mission by funding fellowships, studentships and scientific employment, research projects, research centres and infrastructures, via competitive calls with international peerreview.

1.2. **About RNCA**

RNCA, the National Network for Advanced Computing (Rede Nacional de Computação Avançada - RNCA) offers services of advanced computing to research, innovation and public administration communities.

This network was created in 2018 by the Portuguese digital competence's initiative INCoDe.2030. It was integrated in the RNIE - National Roadmap for Research Infrastructures of Strategic Interest, via Dispatch no. 4157/2019 of the minister of Science and Technology, as the Portuguese counterpart of the Iberian Network for Advanced Computing (RICA), in terms of the Agreement signed between Portugal and Spain in 2018, based on the creation of «MACC — Minho Advanced Computing Centre», in collaboration with FCT IP. FCCN, the scientific computation unit of FCT, acts as RNCA's promoter and general manager.

Through its calls, RNCA has already served many scientific areas from exact sciences and engineering to social and economic sciences, with more than 70 million core.hours.

2. Call for Advanced Computing Projects – 3rd Edition

Main Aspects of the Call 2.1.

This call is intended to support R&D and innovation projects sharing computational resources, carried out by a team of the IR and co-IR or only the IR. The institutions and individuals referred to in Article 3 of the Regulations for Advanced Computing Projects may apply for the allocation of computer resources, either individually or in co-promotion.

2.2. Computational Models

The following computational models are available to applicants:

- High Performance Computing (HPC)
- Scientific Cloud Computing (SCC) or Virtual Research Environment (VRE)

2.2.1. High Performance computing (HPC)

In the present call, each HPC system consists of the following element (for further details please check the section 3 of the call notice):

- a) A set of compute nodes operating simultaneously, temporarily dedicated to a single application; each set together can execute at least 40 x 10^12 floating point operations per second, tightly coupled, operating in standard nonspecialized microprocessors.
- b) A filesystem accessible to each compute node with a shared bandwidth of at least 40 Gbps with multiple simultaneous flows in each compute node.

2.2.2. Scientific Cloud Computing (SCC) or Virtual Research Environment (VRE)

Both models, SCC and VRE are realised through a computing architecture of a virtual servers.

Scientific Cloud Computing (SCC)

In the present call, each Cloud computing system consists of the following elements (for further details please check the section 3 of the call notice):

- a) A set of compute nodes shared among several users and applications, available via a self-service system with maximum a quota available, through a virtualized software layer in cloud computing laaS.
- b) Virtual machines (VM) made available will access a virtual disk through local devices, or with a remote filesystem.

Virtual Research Environment (VRE)

In the present call, each VRE or Virtual Environment consists of the following elements (for further details please check the section 3 of the call notice):

- a) A set of interoperable online tools that facilitate the management, storage, processing, and visualization of research data between one or more groups/institutions.
- b) Similarly to SCC, they require a set of compute nodes, memory and data storage capacity, and the possibility of creating VMs.
- c) VREs can make use of SCC and these can be complemented by HPC to perform heavier processing tasks.

2.3. Types of Access

The present call includes the following access typologies:

- A0 Experimental Access
- A1 Preparatory or Development Access
- A2 Project or Regular Access

Table 1. Summary of access typologies with duration and maximum limits per application.

	Α0	A1	Α	.2
Computational Model	HPC and/or SCC			SCC or VRE
Duration ^a	6 m	onths	12 months	24 months
CPU core.hours ^b	F0 000	100.000	3.000.000	-
vCPU.hours ^b	50.000	100.000	1.200	0.000
GPU.hours ^b	730	2.190	8.7	760
Quota ^c	5%	15%	80	0%

^aMaximum duration, extendable for a further 6 months in duly justified and approved cases; bMaximum limits of computational resources, or less, in case the capacity installed in the operational centre does not allow the maximum limits mentioned. For projects requesting SCC or VRE, applicants should consider a maximum limit of 256 GB RAM (memory) and 5 TB storage per

^cQuota of resources reserved for each access typology. Should the resources requested not meet one of the aforementioned quotas, the remaining part may be allocated to other(s) typology(ies).

2.3.1. A0 – Experimental Access

This type of access should be used for all projects without previous experience in HPC or SCC or no usage history in the proposed computational platform of RNCA. Basic technical support will be provided to all users by the Operational Center.

Applications for this type of access will be subject to administrative validation by FCT and technical validation by members of the RNCA operational centres that manage the resources requested.

In the context of this call, requests to use visualization resources (e.g. GPUs dedicated for this purpose), by teams with or without previous experience, will also be admitted in this type of access.

2.3.2. A1 – Preparatory or Development Access

This type of access should be used for all projects with some previous experience in HPC or SCC or usage history in the proposed computational platform of RNCA. It should be primarily focused on software performance or scalability tests, benchmarking, re-factoring and even small/short projects that do not require more than the resources limit established for this access. Basic technical support will be provided to all users by the Operational Center.

The applications for this type of access will be subject to administrative validation by the FCT and technical evaluation by members of the RNCA operational centres that manage the resources requested.

2.3.3. A2 – Project or Regular Access

This type of access is intended for HPC, SCC or VRE usage and is recommended for scientific or innovation projects carried out by a team with previous demonstrated experience in advance computing. To demonstrate scalability and minimum performance, there should be a prior run in access mode A1 or A0 or other similar system outside RNCA. Justification for the requested resources and a software scalability graph will be asked on the application form.

The applications for this type of access will be subject to technical suitability evaluation by members of the RNCA operational centres that manage the resources requested and scientific evaluation by external evaluation panels invited by FCT, I.P.

2.4. Available Resources

In the present call, the following table characterizes the available resources. FCT may, at any time, reinforce or adjust maximum allocation of available resources, if justifiable. The sum of the total capacity available is 36 million CPU core.hours or vCPU.hours and 105 thousand GPU.hours.

Table 2. Summary of the operational centres and their computing platforms available in this call. Detailed information on hardware and software can be found in the technical sheet of this call.

Operational centre	Platform	Computational model	System
MACC	Bob	НРС	360 compute nodes, each one with 2 Intel X86 Xeon E5-2680 (8 cores each CPU) @2.7Ghz 2GB-RAM/core. 4 GPU Tesla T4
LCA-UC	Navigator Navigator+		164 compute nodes, each one with 2 Intel Xeon E5-2697v2 (12 cores each CPU) @2.7 GHz 32 compute nodes, each one with 2 Intel Xeon Gold 6148 (20 cores each CPU) @2.4 GHz; 4-8 GB-RAM/core; 8 GPU Tesla V100; 2 GPU Nvidia A40 for visualization
HPC-UE	Oblivion		88 compute nodes, each one with 2 Intel Xeon Gold 6154 (18 cores each CPU) @3.0 Ghz; 5.33 GB-RAM/core
	Vision		16 GPU Tesla A100

INCD	Cirrus-A		CPU AMD EPYC 7501, each one with 500GB-RAM and 64 cores; CPU type AMD Opteron 2356, each one with 32 GB-RAM and 8 cores; (see technical sheet); 5 GB-RAM/core; 4 GPU Tesla T4
	Stratus	SCC or VRE	vCPU AMD EPYC 7501, each one with 500GB-RAM and 64 cores

Annotations: The computational allocations per RNCA platform are detailed in the technical sheet of the present call and correspond to the best projection that is possible at the time of publication.

2.5. Beneficiaries and Project Eligibility Criteria

Eligibility criteria, both for beneficiary entities and projects, follow the applicable Regulations, and will be subject to an administrative review to be carried out by FCT. Eligibility is thus not part of the evaluation process.

More on eligibility criteria can be found on Article 6 of Regulations on Advanced Computing Projects. All applications will be subject to an administrative validation prior to the evaluation process.

Each application must include the following information to be provided via online form:

- duration of the project that can be up to 6, 12 or 24 months, depending on the respective type of access (A0, A1 or A2) and computational model (HPC, SCC or VRE) and extendable for a maximum of 6 additional months in duly justified and approved cases.
- total requested computational resources according to the type of access (A0, A1 or A2) and the objectives of the proposed project.
- Indicate the computational model(s) along with platform preference(s) to execute the project. The same proposed project can apply for more than one computational model (HPC, SCC or VRE) and should indicate platform preference.
- **title and brief description** of the advanced computing project.
- a work plan and a justification for the resources requested.
- brief description of the work team, including the identification of the Responsible Investigator (IR), who is responsible, for meeting the proposed objectives and rules governing the use of RNCA resources.
- other elements indicated in the application form.

Multiple applications of the same project are allowed for one or more computational models (HPC, SCC or VRE) and for one or more platforms too.

The maximum limit of applications per Principal Investigator (IR) or co-Principal Investigator (co-IR) is as follows:

- Each IR and co-IR may submit a maximum of ONE application for A2 access type.
- Each IR may submit a maximum of ONE application for A0 and A1 access types every 3 months, always subject to the availability of resources in these types.

3. Evaluation Criteria

In accordance with Article 14 and 15 of the Advanced Computing Projects Regulation, (Regulation No. 10/2022), all applications received will be assessed with the following criteria:

Selection Criteria for A0 – Experimental Access

- Summary technical validation simplifying criteria T1, T2 and T3;
- Requests will be served on a first come first served basis until the quota defined for these accesses is exhausted.

Selection Criteria for A1 – Preparatory or Development Access

- T1: Technical fitting to RNCA resources (25%);
- T2: Computational resources reasonability and capacity planning (50%);
- T3: Work Plan (25%).

Selection Criteria for A2 – Project or Regular Access

- T1: Technical fitting to RNCA resources (10%).
- T2: Computational resources reasonability and capacity planning (20%);
- T3: Work Plan (10%);
- S1: Scientific relevance which includes the proposed activity (20%);
 - Scientific merit of the project (50%);
 - Innovative nature of the project (50%);
- S2: Justification of the computational activity to support the scientific project (20%);
- S3: Scientific merit and experience of the group and responsible investigator (15%);
 - Scientific merit of the Responsible Investigator (20%);
 - Scientific merit of the Research Team (20%);
 - Experience in Advance Computing (60%);
- S4: Dissemination and exploitation of results (5%).

Table 3. Summary of the evaluation process and criteria to be applied to the applications.

	Α0	A1	A2
Technical Suitability	-		fitting to RNCA resources ^a onal resources reasonability and capacity planning ^a
Scientific Merit	-	-	S1: Scientific relevance which includes the proposed activity b S2: Justification of the computational activity to support the global scientific project b S3: Scientific merit and experience of the group and responsible investigator; S4: Dissemination and exploitation of results

^aIn case of proven execution above 50% of a previous project of the same IR with delivery of the corresponding progress report, T1 and T2 may be bonified by 20%; bln case of justified and proven absence of experience where S3.3<5 points, the criteria S1 and S2 may be bonified by 10%.

3.1. Explanation of Main Criteria

3.1.1. Technical Suitability

What is being evaluated?

The technical evaluation of applications for access types A1 and A2 will be performed by the technical teams that operate the computational platforms.

T1 - TECHNICAL FITTING TO RNCA RESOURCES

What is being evaluated?		
•	istence of proposed base software and resources at RNCA platforms, within isting frameworks, including software licenses.	
score 10	should be given if proposed base software and resources exists in RNCA, or can be provided by the user as long as there is experience in its usage within RNCA.	
score 5	should be given if proposed base software and resources can be installed in RNCA, or can be provided by the user as long as there is experience in its usage within RNCA.	
score 0	should be given if proposed base software and resources cannot be installed in RNCA or cannot be provided by the user, within existing frameworks and deadlines.	

Intermediate values can be used for in between situations. Bonification: In case the proposal demonstrates execution above 50% of a previous project of the same IR with delivery of the corresponding progress report, T1 may be bonified by 20%.

T2 - COMPUTATIONAL RESOURCES REASONABILITY AND CAPACITY PLANNING

a)	Justifications and calculations for requested quantities of CPU core.hours, GPU.hours,
	RAM, storage.
b)	Scalability of software / code.
c)	Parameterization and configuration of proposed software/code.

Requested resources and "Justification of computational resources" answer in the form will be useful to evaluate this criterion.

score 10	should be given if justifications and calculations for the requested resources are fully reasonable, the software/code scales well and the proposed software/code is optimized.
score 5	should be given if requested resources need adjustments or are not justified and the software/code needs further optimization.
score 0	should be given if the requested resources and justifications are not clear at all or impossible to execute the project or the proposed software/code is unoptimized, i.e., only installed with default settings.

Intermediate values can be used for in between situations. Bonification: : In case the proposal demonstrates execution above 50% of a previous project of the same IR with delivery of the corresponding progress report, T2 may be bonified by 20%.

T3 - WORK PLAN

What is being evaluated?

- a) Identification of the planned activities, their structure and adequacy to the established methods and objectives.
- b) Adequacy of the human resources and methodologies to perform the proposed objectives and tasks and meet the proposed deadlines.
- c) Quality (clarity, consistency, and adequacy) of the project, taking into consideration the theoretical framework of the research methodology and the work plan.

"Work plan" answer in the form will be useful to evaluate this criterion.

score 10	should be given if a) is clearly identified and b) and c) are outstanding.
score 5	should be given if a) is partially identified and b) and c) are marginally achieved without compromising the project.
score 0	Should be given if the proposal lacks fundamental information of a), b) and c) compromising the overall execution of the project.

Intermediate values can be used for in between situations.

3.1.2. Scientific Merit

The scientific merit of the applications will be performed by scientific external reviewers, according to the scientific sub-area of each application.

S1 - SCIENTIFIC RELEVANCE WHICH INCLUDES THE PROPOSED ACTIVITY

Sub-criterium: S1.1 - Scientific merit of the project

What is being evaluated?

- a) Identification of the project objectives and scientific challenges addressed by the
- b) Potential contribution of the research project to the advancement of knowledge.

The project general description and associated scientific/innovation project details filled by the candidate in the application form might be useful here.

Score 10	should be given if a) and b) explanations are clear and outstanding.
Score 5	should be given if a) and b) lack clarity or are poorly explained without compromising the project.
Score 0	should be given if the proposal lacks fundamental information of a) and b), i.e., the scientific outcomes are not described or not addressed at all.

Sub-criterium: S1.2 - Innovative nature of the project

What is being evaluated?

- a) Potential for breakthrough findings by comparison with the current state-of-the-art of the scientific area.
- b) Methodological innovation, and replication potential.

Potential impact of the project's outcomes on the economic, technological, and societal dimensions.

The project general description and associated scientific/innovation project details filled by the candidate in the application form might be useful here.

Score 10	Should be given if a), b) and c) are clear and outstanding.
Score 5	should be given if a), b) and c) lack clarity or are poorly explained without compromising the project.
Score 0	should be given if the proposal lacks fundamental information of a), b) and c), i.e., the scientific novelty is not described or not addressed at all.

Intermediate values can be used for in between situations. Bonification: in case of justified and proven absence of experience where \$3.3<5 points, \$1 may be bonified by 10%.

S2 - JUSTIFICATION OF THE COMPUTATIONAL ACTIVITY TO SUPPORT THE GLOBAL SCIENTIFIC PROJECT

What is being evaluated?

- a) Identification of the link between the advanced computing activities and the tasks of the global scientific project.
- b) Impact of the advanced computing project on the goals of the global scientific project

score 10	should be given if a) and b) are clearly explained and proved to be very relevant.
score 5	should be given if a) and b) are partially explained and relevant.
score 0	should be given if a) and b) are not addressed or if the advanced computing project is not relevant to the global project.

Intermediate values can be used for in between situations. Bonification: in case of justified and proven absence of experience where S3.3<5 points, S2 may be bonified by 10%.

S3 - SCIENTIFIC MERIT AND EXPERIENCE OF THE GROUP AND RESPONSIBLE INVESTIGATOR

Sub-criterium: S3.1 - Scientific merit of the Responsible Investigator (IR)

What is being evaluated?

- a) Merit of the scientific and professional career of the IR valuing different components: scientific participation in research projects, publications, leadership/organization/participation in networks and conferences, participation in activities of scientific training and management, outreach activities.
- b) IR'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.
- c) 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 IR's career.

"CienciaVitae" records will be useful to evaluate this criterion.		
score 10	should be given if a), b) and c) are outstanding with excellent proven track record.	
score 5	should be given if a), b) and c) are addressed and marginally relevant.	
score 0	should be given if a), b) and c) are not relevant or are absent in the proposal.	

Sub-criterium: S3.2 - Scientific merit of the Research Team

What is being evaluated?

- a) Scientific productivity of the team (references to publications and citations in published works, other relevant indicators).
- b) Ability to engage young researchers in training.
- c) Degree of internationalisation of the team (when appropriate).
- d) Availability and commitment of its members (and other entities, when applicable).
- e) Level of commitment of any companies participating in the project (if applicable).

"CienciaVitae" records and team described in "work plan" will be useful to evaluate this criterion.

score 10	should be given if a), b), c), d) and e), when applicable, are outstanding and fully shown.
score 5	should be given if a), b), c), d) and e), when applicable, are addressed and marginally relevant.
score 0	should be given if a), b), c), d) and e), when applicable, are not relevant or cannot contribute to the execution of the project or are absent in the proposal.

Sub-criterium: S3.3 - Experience in Advance Computing

What is being evaluated?

- a) Level of knowledge/training of the team in advanced computing, including its relevance to the current proposal.
- b) Abilities and skills to adequately execute the proposed project in its specific area, considering the team's configuration.
- c) Level of experience of the team on the proposed platform, including information of software/codes that have run previously on the proposed platform.

"Previous experience" answer and Final report of previous CPCA edition might be useful to evaluate this criterion.

score 10	should be given if a), b) and c) are outstanding and well demonstrated.
score 5	should be given if a) and b) are addressed and marginally relevant but c) is not demonstrated.
score 0	should be given if a), b) and c) are not relevant or cannot contribute to the execution of the project or are absent in the proposal.

Intermediate values can be used for in between situations. Bonification: in case of justified and proven absence of experience where S3.3<5 points, S1 and S2 may be bonified by 10%.

S4 – DISSEMINATION AND EXPLOITATION OF RESULTS

What is being evaluated?

- a) Intention to disseminate the results in scientific journals and conferences.
- b) Strategy to make the data produced publicly available and openly accessible (data management plan).
- c) Proven dissemination of results from previous advanced computing projects funded by FCT (when applicable).

"Work plan	" and "DMP" answers will be useful to evaluate this criterion.	
score 10 should be given if a) and b) are clearly demonstrated and, when applicable, c) is		
	also demonstrated.	
_		

	also demonstrated.	
score 5	Should be given if a) and b) are not sufficiently addressed and, when applicable,	
	c) is not demonstrated.	
score 0 Should be given if any of a), b) and c) are not addressed.		

Intermediate values can be used for in between situations.

3.2. Scoring, Formula and Weights

Scoring is based on a quantitative scale from 0 to 10, with increments of 0.25. The final scores may be rounded up to 2 decimal places.

Formula and weights for A1 Access type

The evaluation of proposals is carried out by the technical teams that operate the computational platforms experts, according to the defined criteria in section 3.1.1 and applying the following formula:

Final Score =
$$25\% \times T_1 + 50\% \times T_2 + 25\% \times T_3$$
.

For each batch of applications, a ranked list of applications is generated. In case two or more applications present the same Final Score after application of the evaluation criteria, preference is given to the one with the oldest submission date and time.

The RNCA access committee (as defined in article 10 of the Internal Regulations, published in the DR under no. 1049/2020) integrates and distributes the computing resources according to the quotas described in 2.3.

Formula and weights for A2 Access type

The evaluation of proposals comprises two steps: the technical suitability is carried out by the technical teams, according to the criteria described in section 3.1.1, and scientific merit is assessed by external reviewers' panels, according to the criteria described in section 3.1.2. All A2 access type applications go through both assessments and a final score is generated applying the following formula:

Nota final = $40\% \times Technical suitability + 60\% \times Scientific Merit$. *Nota final* = $10\% \times T_1 + 20\% \times T_2 + 10\% \times T_3 +$

$$+20\% \times S_1 + 20\% \times S_2 + 15\% \times S_3 + 5\% \times S_4.$$

If two or more proposals present the same value, as a result of the application of the evaluation criteria, the one with the highest score in the following criteria will be considered the best ranked: S2, followed by T2 and finally S3.

4. Evaluation Process and Procedures

4.1. General Information

- All applications will be analysed according to criteria mentioned in section 3.1.
- FCT is responsible for verifying the eligibility requirements of each project according to factual and legally binding criteria.
- Technical validation of A0 Experimental Access is assessed by Advanced Computing Services at FCCN, FCT unit.
- Technical evaluation is assessed by staff of the operational centres.
- Scientific evaluation is assessed by scientific external reviewers, according to the scientific sub-area of each application.
- The scientific external reviewer has to declare any Conflict of Interest identified for any particular application.
- A ranked list and an evaluation report will be produced, comprising all applications eligible. The proposed list of ordered projects will be prepared by the access committee, headed by a Coordinator.
- Whenever a particular expertise is not covered by the access committee members, they may ask advice to external counselling.
- The access committee will issue a final report on its activities containing the following elements:
 - The score and comments for each of the evaluation criteria
 - A recommendation section for adjusting computational capacity.
- The access committee members are asked to give support to FCT during the period spanning the evaluation meeting and the final decision (i.e., analysis of potential appeals of technical nature presented by the applicants);
- There is an allocated FCT team for the evaluation process, which will act as the contact point for the staff of the operational centers.
- For A1 and A2 access types, myFCT platform will generate an individual report for each reviewed application, that can be consulted by the IR or co-IR.

Constitution of the Technical Suitability Panels

Each Operational center (MACC, LCA-UC, HPC-UE and INCD) will nominate at least 2 elements to evaluate criteria T1, T2 and T3.

Constitution of the External Scientific Panels

The scientific merit of A2 applications (S1, S2, S3, S4 criteria) will be evaluated by external evaluation panels, according to the scientific sub-area of each application. There are the following panels, each of them coordinated by an element designated as such by FCT, I.P:

- P1 Physics and Mathematics;
- o P2 Chemistry and Materials;

- P3 Engineering and Technology;
- o P4 Life and Health Sciences;
- o P5 Earth and Environmental Sciences;
- o P6 Social and Economic Sciences.

MyFCT platform will support A2 evaluation. Scientific Reviewers will receive guidelines on how to access the platform, sign the Term of Responsibility, declare any conflicts of interest (see point 5.2 below) and evaluate each application.

Each application will be automatically integrated in the most relevant panel according to the scientific sub-area filled out by the candidate (check Panels and scientific areas document).

4.3.1. Scientific Evaluation Process

To access scientific merit there will be 3 stages: Individual, Pre-consensus and Panel meeting.

- Individual stage: Before accessing each application, the reviewer must declare whether
 a CoI is identified for that particular application. Each reviewer carefully analyses and
 grades each of their allocated applications. Each application will be reviewed by 2
 different evaluators from the same panel. One is appointed as first reader of each
 application. The allocation of the applications to Panel Members necessarily takes into
 consideration any declared Conflict of Interest (CoI), as well as the matching of
 professional and scientific expertise within the topic of the application.
- **Pre-consensus**: In preparation for the panel meeting, 1st readers will join both individual evaluations for each application. If the 1st reader is unable to reach a pre-consensus report based on the two individual reviews, the Panel Coordinator should settle the difference prior to the panel meeting, whenever possible.
- Panel meeting: All evaluations from the same panel will meet (remotely) and a panel ranked list will be produced according to pre-consensus graded applications. The panel coordinator will be responsible for managing this meeting and any discrepancies that might arise from the ranked list. The panel must ensure that each application receives a fair judgement and is discussed appropriately. The panel must settle the final scores for each scientific criterion, as well as the comments to be conveyed to the applicants, and ensure that the scores are in agreement with the comments.

Note: Technical Suitability criteria (T1, T2, T3) will be evaluated on myFCT platform by the Operational Centres.

4.4. Constitution of the Access Committee

Note: in this document "access committee", "evaluation panel" and "evaluation committee" are all synonyms for the same expression.

- The access committee (AC) is composed of a coordinator nominated by FCT, and an element from each operational centre (MACC, LCA-UC, HPC-UE and INCD).
- AC is established by the Internal RNCA Regulations, published under no. 1049/2020 in the official law gazette (*Diário da República*).

4.4.1. Ranking of Proposals and Resources Allocation by the AC

For A0 and A1 accesses: for each round, a ranked list of proposals will be defined according to the above defined criteria and timings – see section 3. AC will integrate and distribute the

computational resources according to the quotas of 5% to A0 and 15% to A1 accesses and/or until the resources are exhausted.

For A2 accesses: each panel generates a ranked list of proposals according to the defined criteria and weights - see section 3. Then, the AC will integrate and distribute the computational resources by the platforms reserved quota of 80%, following the 20-40-40 principle:

- 20% of the highest scoring proposals in each panel will have recommended access to 50-100% requested resources, according to the platform preference indicated in the application and its availability.
- 40% of the following proposals will have recommended access to 50-75% of the requested resources.
- The remaining 40% of proposals will have recommended access to 5-25% according to platform availability.

At the end of the process, ranked lists with allocated resources per platform for each Access Type (A0, A1 and A2) will be produced by the AC, considering the candidate platform preference whenever possible. A0 and A1 accesses will have, respectively, a ranked list for each round, while A2 accesses will have only one, approved by FCT.

5. Confidentiality and Conflicts of Interest

5.1. Confidentiality

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

Conflicts of Interest (CoI) 5.2.

Access committee members that have submitted any application to the present Call, as IR, co-IR, team member or consultant to the project, may have to decline participating in the evaluation process.

Moreover, the scientific reviewers on myFCT platform must fill in the conflict statement for all applications assigned under the same scientific panel. Col subtypes:

- Personal or financial interest in the application's success;
 - a) Have a family relationship with the Responsible Investigator (IR) or co-Responsible Investigator (co-IR).
 - b) Have a scientific or personal conflict with the IR or co-IR.
 - c) Have a financial interest with the IR or co-IR.
- Current or planned close scientific cooperation;
 - a) Have ongoing scientific collaboration with the IR or co-IR.
 - b) Have published scientific papers with the IR or co-IR in the three years prior to the opening date of the application period
- Dependent employment relationship or supervisory, within the last 3 years before the opening date of the call.

To be in any other situation that may raise doubts, either to you or to third parties, to the candidate, regarding your ability to evaluate the application impartially.

6. Glossary

- Col = Conflict of Interest
- Co-Ir = Co-Responsible Investigator
- FCT-FCCN = unidade de Computação Científica Nacional da FCT
- HPC = High Performance Computing
- HPC-UE = High Performance Computing Universidade de Évora
- INCD = Infraestrutura Nacional de Computação Distribuída
- IR = Responsible Investigator
- LCA-UC = Laboratório de Computação Avançada da Universidade de Coimbra
- MACC = Minho Advanced Computing Center
- R&D = Research and Development
- R&I = Research and Innovation
- RNCA = National Advanced Computing Network, acronym for Rede Nacional de Computação Avançada
- SR&TD = Scientific Research and Technological Development
- SCC = Scientific Cloud Computing
- VM = Virtual Machine
- VRE = Virtual Research Environment

7. Appendix - Applications Evaluation Calendar

a) A0 - Experimental access

This access follows a simpler procedure, where small projects will be fast-track validated (with a summarized technical validation) every 2 months.

Applications round	Latest submission date	Technical validation expected from
Α	13 December 2022 (13h, Lisbon time)	14 December 2022
В	7 February 2023 (13h, Lisbon time)	8 February 2023
С	4 April 2023 (13h, Lisbon time)	5 April 2023
D	31 May 2023 (13h, Lisbon time)	1 June 2023

b) A1 – Preparatory or Development Access

This access only requires technical evaluation, where small projects will be evaluated every 2 months.

Applications round	Latest submission date	Technical evaluation expected from
Α	13 December 2022 (13h, Lisbon time)	14 December 2022
В	7 February 2023 (13h, Lisbon time)	8 February 2023
С	4 April 2023 (13h, Lisbon time)	5 April 2023
D	31 May 2023 (13h, Lisbon time)	1 June 2023

c) A2 – Project access

This access requires both technical and scientific evaluation. Submissions end on 6th December 2022 (13h, Lisbon time). Preliminary evaluation calendar:

Latest submission date	Technical evaluation expected from	Scientific evaluation expected from
6 December 2022 (13h, Lisbon time)	2 January 2023	1 February 2023

Last update: 7/11/2022













